O'BRIEN & GERE

P.O. Box 4873 / 1304 Buckley Road / Syracuse, New York 13221 / 315 451-4700

# Transmittal

To: Kevin Kelly
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Region 7
7481 Henry Clay Blvd.
Liverpool, NY 13088

Date: 7/6/88

File: 1194.004.110
Phase II Addendum

Re: Prestolite Electric, Inc.

Gentlemen: We are sending you X herewith ____ under separate cover

____ drawings X descriptive literature ____ letters

| Quan. | Identifying Number | Title | Action* |
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| 2 | July 1988 | Phase II Investigation Report Addendum, Prestolite | I |
| | | Electric Inc., Syracuse, NY | |
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*Action lettercode: **R**-reviewed **N**-reviewed and noted **I**-for your information
**S**-resubmit **J**-rejected **Y**-for your approval

Remarks:

RECEIVED
JUL 7 1988
DEPT. OF ENV. CONSERVATION
REGION 7 LIVERPOOL

If material received is not as listed, please notify us at once.

cc. Mr. Dale F. Schmidt, Prestolite Electric, Inc.
Mr. James A. Herman, Allied Automotive
Mr. Joseph P. Lewandowski, ERM Inc.

Very truly yours,
O'Brien & Gere Engineers, Inc.

SRGarver

Steven R. Garver, P.E.
Vice President

:jd

Report
Addendum

# Phase II Investigation

Prestolite Electric, Incorporated
Syracuse, New York

July 1988

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July 05, 1988

Mr. Kevin Kelly
Region 7
NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL CONSERVATION
7481 Henry Clay Blvd.
Liverpool, New York 13088

Re: Prestolite Phase II Investigation Addendum Report and Additional Site Sampling

File: 1194.004.110

Dear Kevin:

Attached is the Report Addendum for the Phase II Investigation performed at the Prestolite Electric, Inc. facility in Syracuse, New York. This is the final version of the report we discussed in our meeting dated 17 December, 1987.

Based on the results contained in the Report Addendum, additional limited site work is proposed. We propose to conduct further monitoring of the site wells during 1988. The purpose of this additional monitoring effort is to determine if site ground water conditions remain consistent with baseline results as reported in the August 1986 Report and the Report Addendum.

Two (2) sampling rounds of monitoring wells MW1 through MW5, MW8, MW10, and MW11 are proposed for the summer and fall of this year for the following parameters: pH, Specific Conductance, total cyanide, phenols, Oil & Grease, TOC, TOX, and the filtered metals cadmium, chromium (total), copper, iron, lead, and zinc. Monitoring wells MW6 and MW7 are already being sampled quarterly for the decommissioning project, and MW9 is inaccessible.

We also discussed the decommissioning project during our December meeting. Additional sampling and pumpouts of the in-ground tanks is continuing through three (3) additional cycles. The current schedule is to complete the decommissioning by mid summer of 1988. Attached, for your information, is a letter to Joseph Mastriano of the Onondaga County Department of Drainage and Sanitation which updates the status of the decommissioning project and wastewater discharges.

Please contact John Rinko or me at your convenience if you have any questions or comments.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Steven R. Garver

Steven R. Garver, P.E.
Vice President

cc: Mr. James A. Herman, Allied Automotive
Mr. Dale F. Schmidt, Prestolite Electric Inc.
Mr. Elton Mantle, Prestolite Electric Inc.
Mr. Joseph P. Lewendowski, ERM Inc.
Mr. John Rinko, Jr., O'Brien & Gere

Enclosures

1194.004

# REPORT ADDENDUM

# PHASE II INVESTIGATION

PRESTOLITE ELECTRIC, INCORPORATED

SYRACUSE, NEW YORK

JULY, 1988

O'BRIEN & GERE ENGINEERS, INC.
1304 BUCKLEY ROAD
SYRACUSE, NEW YORK 13221

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# SECTION 1 - INTRODUCTION AND BACKGROUND

## 1.01 Introduction

The results of a Phase II Site Investigation for the Prestolite Electric, Incorporated (Prestolite) facility in Syracuse, New York were presented in a report dated August 1986. This investigation, conducted in accordance with New York State Department of Environmental Conservation (NYSDEC) guidelines, developed geotechnical and analytical data to determine if past or present operations at the site have impacted soil or ground water quality. The study is being done for the previous owners of the site, Allied-Signal Corporation.

Based on the results of this preliminary investigation, additional site investigations were recommended and a Work Plan (May 1987) was developed upon consultation with NYSDEC, Prestolite and Allied Automotive representatives. This Work Plan is included as Attachment 1A. The additional investigations included soil sampling and installation and analyses of six additional ground water monitoring wells. The results of these investigations are presented in this Addendum to the Phase II Investigation Report.

## 1.02 Background

A summary of the facility background is included in Section 1.02 of the Phase II Investigation Report dated August 1986. Twelve (12) areas were identified by Prestolite as areas potentially impacted by historical site operations. Ten of these areas, shown on Figure 1A, were the subject of this additional work effort. These areas include:

A,B. Obsolete Wastewater Treatment Plant

D. Drainage Ditch

E. Eastwood Sewage Treatment Plant

F,G. Parking Lot Annex

H. Loading Dock Area

I. Alleged Disposal Area from Neighboring Industry

K. Old Heat Treating Area

P. Parking Lot Annex (Alleged Municipal Landfill Area)

Areas A and B, and Areas F and G have been grouped together due to their overlapping locations on the site. This grouping produces eight locations for which additional investigations were performed.

The remaining areas identified in the Phase II Investigation Report which have not been specifically addressed are Area C and Area J. Area C, adjacent to the south parking lot, is where it is alleged that local residents disposed of domestic refuse. The sampling in the drainage ditch downgradient of this area satisfactorily addressed concerns with Area C. Area J may have been the location of parts of the Eastwood Sewage Treatment Plant. This area overlaps areas F, G, and P and was satisfactorily addressed in the additional activities for these other areas.

## SECTION 2 - REGIONAL PHYSIOGRAPHY

### 2.01 Topography and Drainage

A discussion of the site topography and drainage can be found in Section 2.01 of the Phase II Investigation Report dated August 1986.

### 2.02 Area Land Uses

The surrounding land uses are detailed in Section 2.02 of the August 1986 Report.

## SECTION 3 - FIELD INVESTIGATION

### 3.01 Additional Monitoring Well Installations

Six additional monitoring wells (MW6 through MW11) were installed at the Prestolite facility to address three areas of potential concern. The areas of concern include the obsolete Wastewater Treatment Plant (Area A, B), the alleged disposal area adjacent to the neighboring industry (Area I) and the Parking Lot Annex (Area P). The locations of these wells are shown in Figure 1A. The remaining areas did not require monitoring well installations since either existing wells sufficiently addressed ground water concerns or additional soil sampling was performed.

Soil sampling during monitoring well installation and ground water sampling was performed using the methods detail in Sections 3.03, 3.04, and 3.06 of the Phase II Investigation Report dated August 1986.

### 3.02 Additional Soil Sampling

Additional soil sampling was performed to verify earlier analytical results and to address the areas of concern. Specific sampling locations are shown on Figure 1A. Sampling depths are listed in Tables 3A and 4A. Methods detailed in Section 3.04 of the August 1986 Report were used to obtain soil samples. Samples were submitted to OBG Laboratories, Inc. for analyses. Chain of custody procedures were followed throughout the handling and transportation of the samples; the custody records appear in Attachment 2A. Boring logs for the soil samples taken during the investigation are presented in Attachment 3A. All analytical results for soil samples are included as Attachment 5A.

## 3.03 Ground Water Sampling

Ground water samples were initially collected from the five original monitoring wells on 24 October, 1985 as part of the initial site investigation. Additional samples from these wells were collected on 22 December 1986, 2 March 1987 and 4, 5 June 1987. MW6 and MW7 were sampled during December 1986, March 1987 and June 1987. Ground water samples taken for metal analyses were filtered, with the exception of the December 1986 sampling (due to sampling oversight).

The four newest wells, MW8 through MW11, were initially sampled on 5 June 1987. Samples were submitted to OBG Laboratories, Inc. and Upstate Laboratories, Inc. for analyses.

The sampling protocols are included in Section 3.06 of the August 1986 Report. Chain of custody procedures were followed throughout the handling and transportation of all samples; the custody records appear in Attachment 2A. Boring logs for MW6 through MW11 are presented in Attachment 3A. All analytical results for ground water samples are included as Attachment 4A.

## SECTION 4 - SITE CHARACTERISTICS

### 4.01 Geology

A description of the geology in the vicinity of the Prestolite property is included in Section 4.01 of the August 1986 Report.

### 4.02 Ground Water Flow

Ground water flow direction was determined in the initial work effort and is summarized in the August 1986 Report. The data suggested that the ground water flow potential in the area is controlled primarily by the slope of the bedrock surface. This would suggest a northerly ground water flow direction as explained in Section 4.03 of the August 1986 Report.

### 4.03 Analytical Data

Selected ground water analytical results are presented in Tables 1A and 2A. Complete listings of ground water analytical results are included as Attachment 4A. Selected soil sampling analytical results are presented in Tables 3A and 4A. Complete listings of soil analytical results are presented in Attachment 5A. These results are discussed below for each site area.

### 4.04 Wastewater Treatment Plant

The obsolete Wastewater Treatment Plant (WTP) decommissioning began in June 1987. The procedures used to perform the decommissioning are detailed in O'Brien & Gere's document titled "Treatment System Decommissioning Plans and Specifications", dated March 1987.

This document details procedures for the water treatment, solids removal, facility decontamination, demolition of the structures and tanks, and site restoration.

A report summarizing the on-site activities, analytical results from the water treatment, waste generation and disposal, decontamination results, and demolition and restoration activities will be prepared upon completion of the decommissioning. Photo documentation of the activities is included in the decommissioning report.

Two ground water monitoring wells were installed downgradient of the WTP (MW6 and MW7) during October 1986. These wells were installed to determine if the tanks in the WTP are impacting the ground water in the vicinity of the WTP. Previous sampling of the water and sediments found in the treatment tanks indicated the presence of elevated concentrations of cadmium, chromium, copper, cyanide, lead and zinc. The concentrations of cadmium, copper, cyanide, and zinc found in Tank 3, the pH level in Tank 4 and the pH level and cyanide concentration in the standing water in the basement of the WTP required pretreatment to be acceptable for discharge to the Syracuse Metro POTW. The cadmium concentration found in the sediments of Tank 3 characterizes it as a EP Toxic hazardous waste.

Analytical results for ground water samples taken from MW6 and MW7 are given in Tables 1A and 2A. Ground water samples from MW6 and MW7 have exhibited concentrations of cyanide, iron and phenols that exceed New York State ground water standards (NYSGWS). MW6 exhibited an iron concentration of 0.85 mg/L (3/2/87), above the NYSGWS of 0.3 mg/L and two phenol concentrations of 0.002 mg/L (11/26/86) and 0.013 mg/L (12/22/86) that are above the NYSGWS of

0.001 mg/L. MW7 exhibited iron concentrations of 1.4 mg/L (3/2/87) and 0.5 mg/L (6/5/87), that are above the NYSGWS of 0.3 mg/L and three cyanide concentrations of 0.43 mg/L, 0.21 mg/L and 3.8 mg/L (11/26/86, 3/2/87 and 6/5/87, respectively) that are above the NYSGWS of 0.2 mg/L. MW7 also exhibited phenol concentrations (0.009 mg/L to 0.056 mg/L) on all four sampling dates that are above the NYSGWS of 0.001 mg/L. Copper and zinc concentrations and pH levels in ground water samples from MW6 and MW7 are within NYSGWS for the three parameters. Chromium concentrations in samples taken from the two wells are below the detection limit of 0.05 mg/L.

Ground water analysis for lead was performed using the flame atomic absorption method for all the sampling dates prior to 11/19/87. The detection limit for lead using this method is 0.05 mg/L, above the NYSGWS of 0.025 mg/L. The 11/19/87 lead analyses was performed using the furnace atomic absorption method, with a 0.025 mg/L detection limit. Using the flame method for lead determination is subject to error since reported values can be less than an order of magnitude above the detection limit. This leaves the method vulnerable to procedural error in the sampling or analytical work.

Lead concentrations throughout the site on the 6/5/87 sampling date were elevated when compared to previous and subsequent analytical results. The occurrence of detectable and elevated lead concentrations for all these wells on one sampling date, considering the inactivity of the facility, appears to be anomalous, and reflects procedural errors. The maximum lead concentration observed using the flame atomic absorption method for the 6/5/87 sampling date was 0.13 mg/L, with the majority of the lead concentrations observed being less than 0.10 mg/L.

Given the detection limit for this analysis, the lead concentrations for this day are relatively low, and the method may not be reliable at these levels. Additionally, lead was not detected in any site ground water monitoring well on the sampling date 11/19/87, at a detection limit of 0.025 mg/L. Therefore, the 6/5/87 analytical results for lead are assumed anomalous, and will not be further addressed.

Analytical results for the parameters above the NYSGWS were variable, with the exception of the persistent phenol and cyanide concentrations observed in MW7. High levels of lead, copper, zinc and chromium were not observed in MW6 and MW7.

## 4.05 Drainage Ditch (Area D)

Three soil samples (D3, D4 and D5) were taken from the drainage ditch that runs along the western boundary of the site. The samples were collected from four foot soil borings and were analyzed for total lead, phenol and oil and grease (O&G) at depths of zero feet, two feet and four feet. These samples were obtained to define the vertical and horizontal extent of O&G and phenol in the ditch area. Analytical results for soil samples taken from Area D are presented in Table 3A.

The O&G concentrations in samples D3, D4 and D5 ranged from 42 ppm to 560 ppm. Sample D1, taken during the initial Phase II Investigation, is located upstream of samples D3-D5 in the drainage ditch. The one to three foot core composite obtained from D1 exhibited an O&G concentration of 7300 ppm.

The lead concentrations in samples D3, D4 and D5 ranged from 27 ppm to 230 ppm. Lead does not migrate readily within a soil matrix. The lead is sorbed to the soil and becomes essentially immobile. Sample location D3 had a lead concentration of 230 ppm at the two foot depth, while sample location D5 had a lead concentration of 210 ppm at the surface. These two sample locations are the strata that exhibited the highest lead concentrations.

The phenol concentrations in samples D3, D4 and D5 ranged from less than 0.1 ppm to 2.1 ppm. Sample location D3 exhibited phenol concentrations throughout its depth (0.4 ppm at 0 ft, 0.2 ppm at 2 ft and 2.1 ppm at 4 ft). Samples D4 and D5 exhibited phenol concentrations primarily at the surface of both sample locations. Phenol concentrations at the surface for samples D4 and D5 were 0.3 ppm and 0.7 ppm, respectively. Phenol concentrations at the two and four feet depths of samples D4 and D5 were 0.1 ppm and less than 0.1 ppm, respectively.

### 4.06 Eastwood Treatment Plant (Area E)

Soil samples were collected at sample locations E2 through E4 at depths of two feet and 10 to 20 feet. Two additional soil samples (E5 and E6) were taken at a depth of ten feet. All samples were analyzed for EP Toxic lead and O&G. Sample locations E2 through E4 were resampled for EP Toxic lead as a result of high concentrations (1,010 ppm to 1650 ppm) of total lead reported in the initial Phase II Investigation and to determine if the soils in the tanks exhibit the characteristics of a hazardous waste due to the lead present in the soils. Samples E5 and E6 were taken to determine if the lead present in the tanks was confined to the tanks. Analytical results for all soil samples taken from Area E are presented in Table 3A.

The EP Toxic lead concentrations in the soil samples from Area E ranged from 0.25 ppm to 0.86 ppm. The EP Toxic lead concentration must be above 5.0 ppm in the soils for the samples to be considered hazardous wastes, so the soils in the area of the Eastwood Treatment Plant Imhoff Tanks would not be considered hazardous wastes.

The O&G concentrations ranged from 34 ppm to 1300 ppm for samples E2, E3 and E4. Sample locations E5 and E6, taken at a depth of ten feet, had O&G concentrations less than 1 ppm.

## 4.07 Parking Lot Annex Area (Area P)

Two ground water monitoring wells (MW10 and MW11) were installed downgradient of the P area during May 1987 to determine the extent of migration of parameters found in the P area during the initial Phase II Investigation. The initial Phase II Investigation reported high values of O&G (50 ppm to 3500 ppm), lead (less than 1 ppm to 1880 ppm) and one detectable concentration of xylene (14 ppm) in the soils from the P area. Soil samples from the borings were analyzed for BTX, O&G, metals and cyanide. Ground water samples were analyzed for pH, specific conductance, TOC, TOX, O&G, lead, cyanide, metals and volatile organics (Method 624).

Analytical results for all soil samples taken during the installation of MW10 and MW11 are presented in Table 3A. Concentrations of benzene, toluene and xylene were below the method detection limit (10 ppb) for all soil samples taken from the borings of MW10 and MW11. O&G concentrations ranged from less than 1 ppm to 240 ppm in the soil samples from MW10 and MW11, which are substantially lower than the O&G concentrations observed upgradient in the soils in the P area.

Lead concentrations ranged from 11 ppm to 79 ppm, which are indicative of background concentrations. One soil sample was analyzed for cyanide, with a concentration of less than 5 ppm being reported.

The ground water from MW10 and MW11 was sampled 6/5/87 and 11/19/87. Analytical results for ground water samples obtained from MW10 and MW11 are presented in Tables 1A and 2A. All metals analyzed for in both wells were below NYSGWS. Lead concentrations for MW10 and MW11 on the 11/19/87 sampling date were less than 0.025 mg/L. Cyanide values in the ground water from each well were less than the method detection limit of 0.05 mg/L. The O&G concentrations in MW10 and MW11 were 3 mg/L and 4 mg/L, respectively. All organics analyzed for in both monitoring wells were below the method detection limit for each parameter.

One additional shallow soil sample (F1) was collected in Area P. This sample was taken to analyze for EP Toxic lead due to high concentrations (1880 ppm) of total lead reported at this location in the initial Phase II Investigation. The EP Toxic lead concentration at location F1 was 0.19 mg/L, which is well below the maximum concentration of lead (5 mg/L) which would characterize the soil as EP Toxic. (Table 3A)

### 4.08 Disposal Area (Area I)

Two ground water monitoring wells (MW8 and MW9) were installed during May 1987 in Area I, which is an alleged disposal area. Soil samples were collected from the zero to three feet strata and the six to eight feet strata of the borings. Little is known about the history of the area, so EP Toxic metals and volatile and semi-volatile organics were analyzed for in the soil samples taken from the monitoring well borings. Ground water samples from the two wells were analyzed for pH, specific conductance, TOC, TOX, O&G, EP Toxic metals, and volatile and semi-volatile organics.

Analytical results for soil samples obtained during the installation of MW8 and MW9 are presented in Table 4A. All volatile and semi-volatile organics analyzed for in the borings from both wells were below the method detection limit, with the exception of residuals of benzo(a)anthracene (600 ppb), benzo(a)pyrene (500 ppb), benzofluoranthene (400 ppb), benzo(k)fluoroanthene (400 ppb), chrysene (600 ppb), fluoranthene (510 ppb), phenanthrene (420 ppb) and pyrene (690 ppb), which were found in the (0ft.-3ft.) stratum for MW9. The semi-volatiles detected in the borings from MW8 and MW9 were from stratum described as containing fill material, particularly asphalt. The presence of the semi-volatiles may be associated with the asphalt fill. Asphalt materials typically contain the semi-volatiles found in the borings. All metal concentrations were below EP Toxic levels.

The ground water from MW8 was sampled twice (6/5/87 and 11/19/87). The ground water from MW9 was sampled once (6/5/87). MW9 was scheduled to be sampled with MW8 on 11/19/87, but MW9 was inaccessible on that sampling date. Analytical results for ground water samples obtained from MW8 and MW9 are presented in Tables 1A and 2A. The lead concentration in MW8 was less than 0.025 mg/L on 11/19/87. The O&G concentrations at MW8 and MW9 were low at 9 mg/L and 4 mg/L, respectively, while cyanide concentrations in both of the wells were less than the method detection limit (0.05 mg/L).

4.09 Loading Dock Area (Area H)

Two soil borings (H1, H2/H3) were taken from Area H. The borings were ten feet in depth, with soil samples taken from the six feet to nine feet strata. Boring H1 was completed in the same vicinity as shallow soil sample H1, which was taken during the initial Phase II Investigation. Boring H2/H3 was completed halfway between shallow soil samples H2 and H3, which were taken at the northern edge of the pavement during the initial Phase II Investigation. The samples obtained from the borings were analyzed for volatiles, semi-volatiles, EP Toxic metals and O&G. These samples were taken at greater depths than the previous samples at these locations to determine the vertical extent of O&G concentrations in the soil. Analytical results for soil samples taken from Area H are presented in Table 4A.

The O&G concentrations were less than 1 ppm at location H1, which is near the loading dock, and 1330 ppm at location H2/H3, which is near the edge of the driveway. Previous O&G concentrations from shallow soil samples H1, H2 and H3 were 8100 ppm, 2500 ppm and 1500 ppm, respectively.

Location H1 exhibited a total xylenes concentration of 20 ppb at the 6-9 ft. stratum, while the shallow (1ft.-3ft.) soil sample from H1 obtained during the initial Phase II Investigation exhibited a total xylenes concentration of 250 ppb. Location H2/H3 exhibited a fluoranthene concentration of 370 ppb and a phenanthrene concentration of 330 ppb. Asphalt materials typically contain the semi-volatiles found in the borings. All other organics had concentrations that were below the method detection limit or had concentrations due to blank contamination.

## 4.10 Old Heat Treating Area (Area K)

One four-foot soil boring (K1), one two-foot soil boring (K2) and three surface soil samples (K3, K4 and K5) were completed in Area K. Soil samples were collected from boring K1 from the zero to two foot stratum and the two to four foot stratum. Soil samples were collected from boring K2 from the zero to two foot stratum. The soil samples were analyzed for cyanide, O&G and metals. One shallow soil sample was collected from Area K during the initial Phase II Investigation which contained cyanide at a concentration of 694 ppm and an O&G concentration of 400 ppm. The samples were analyzed for cyanide in order to determine the horizontal and vertical extent of cyanide in the soils in Area K. Analytical results for soil samples obtained from Area K are presented in Table 3A.

Cyanide concentrations were less than the method detection limit of 5.0 ppm in all samples except the 0ft.-2ft. stratum from boring K1, which had a cyanide concentration of 14 ppm. The O&G concentrations ranged between 250 ppm and 1500 ppm, with an average concentration of 837 ppm. The highest lead concentration observed from all the soil samples taken, was a surface soil sample taken at location K4, which exhibited a lead concentration of 250 ppm.

## 4.11 Property Boundary Monitoring Wells

Five ground water monitoring wells (MW1 through MW5) were installed and sampled during the initial Phase II Investigation. These wells were also sampled during the supplemental work conducted at the site, for a total of four separate sampling occasions. Ground water from these wells was analyzed for priority pollutants, volatile organics, O&G, TOC, TOX, specific conductance, pH, cyanide and phenol. Samples taken for metal analyses were filtered on all sampling dates, with the exception of the 12/22/86 sampling date. Consequently, metal analyses for all wells for the 12/22/86 sampling date cannot be compared to NYSGWS. Analytical results for ground water samples obtained from MW1 through MW5 are presented in Tables 1A and 2A.

MW1 is the ground water monitoring well located hydraulically upgradient from the Prestolite facility. The initial sampling of the well (10/85) indicated that all parameters analyzed for were below the method detection limit or below the NYSGWS for the parameters. Subsequent sampling of this well has indicated concentrations of lead, phenol, and pH above the NYSGWS for these parameters. A lead concentration of 0.05 mg/L (3/2/87) was reported for MW1, which is above the NYSGWS for lead of 0.025 mg/L. A single pH value of 8.8 S.U. was reported for MW1 during the March 1987 sampling, which is above the NYSGWS upper limit for pH of 8.5 S.U. Phenol concentrations of 0.007 mg/L (12/22/86), 0.006 mg/L (3/2/87) and 0.004 mg/L (11/19/87) were reported for MW1 which are above the NYSGWS for phenol of 0.001 mg/L. Specific conductivity measurements for MW1 averaged 1853 umhos/cm, compared to an average of 981 umhos/cm for all the wells on the site.

MW2 through MW5 are the ground water monitoring wells located hydraulically downgradient from the Prestolite facility. The initial sampling of these wells (10/85) indicated that all parameters analyzed for were less than the method detection limit or below NYSGWS for the parameters. Subsequent sampling of these wells have indicated concentrations of phenol and pH above the NYSGWS for these parameters. A phenol concentration of 0.002 mg/L (12/22/86) was reported for MW2, which is slightly above the NYSGWS for phenol of 0.001 mg/L. pH values of 6.4 S.U. (MW2, 3/2/87), 6.3 S.U. (MW3, 6/4/87) and 6.2 S.U. (MW5, 6/5/87) were reported, which are below the NYSGWS lower limit for pH of 6.5 S.U. The phenol concentrations observed in MW2 through MW5 were less than the highest phenol concentrations observed in upgradient MW1.

### 4.12 Hazard Ranking Score

The New York State Department of Environmental Conservation recently lowered the Prestolite facility from a 2A to a 3 ranking. Hazard Ranking System (HRS) score sheets and supporting documentation were included as Appendix B of the August 1986 report. These score sheets were reviewed using the additional results presented in this Report Addendum. The additional results do not cause any changes to the scoring criteria and the HRS score for the site remains as 2.18.

# SECTION 5 - SUMMARY

## 5.01 Summary

MW1, located upgradient of the Prestolite facility, exhibited a lead concentration (0.05 mg/L ) and three phenol concentrations (0.007 mg/L, 0.006 mg/L and 0.004 mg/L) above appropriate NYSGWS. As previously mentioned in Section 4.04, the lead concentrations for the sampling day 6/5/87 are anomalous due to procedural error and are not representative of the ground water on the Prestolite site. Lead was not detected in MW2 through MW5. pH values below the lower limit of the NYSGWS were reported on one occasion for MW2, MW3 and MW5, while MW1 reported one pH value above the upper limit for the NYSGWS for pH. A single phenol concentration above the NYSGWS for phenol was reported for MW2, but this value was lower than the two phenol concentrations above the NYSGWS for phenol reported for upgradient MW1.

The ground water from MW6 and MW7 in the vicinity of the obsolete Wastewater Treatment Plant (WTP) Area exhibits concentrations of phenols, iron and cyanide that exceed New York State ground water standards (NYSGWS). MW6 exhibited iron and phenol concentrations that exceeded the NYSGWS for these parameters, while MW7 exhibited iron, phenol and cyanide concentrations that exceeded NYSGWS for these parameters.

Oil and grease concentrations observed at sample locations D2, D4, and D5 in the drainage ditch (Area D) were significantly less than the concentrations found at sample location D1, which is located upstream of sample locations D3, D4 and D5. Phenol concentrations were found throughout the strata of sample D4, while phenol concentrations were primarily observed only in the surface samples taken further downstream at sampling locations D4 and D5. The soil samples obtained from the drainage ditch exhibited lead concentrations that were less than 250 ppm.

All soil samples taken in the vicinity of the old Eastwood treatment plant (Area E) exhibited EP Toxic lead concentrations that were well below the concentration that would characterize the substance as a hazardous waste. In addition, EP Toxic lead concentrations at sample locations E5 and E6, which were taken outside of the area of the tanks of the treatment plant, were similar to the EP Toxic lead concentrations found in the soil samples that were taken from within the abandoned tanks. High oil and grease (O&G) concentrations were restricted to the samples taken from within the abandoned tanks. Samples E5 and E6 had O&G concentrations that were less than the method detection limit of 1 ppm.

MW10 and MW11 were installed downgradient of the Parking Lot annex (Area P). All organic parameters analyzed for in the borings were less that the method detection limits, and O&G concentrations were substantially less than the O&G concentrations observed in the soils of the Parking Lot Annex.

The ground water samples taken from MW10 and MW11 did not reflect the high concentrations of O&G observed in the soils of the Parking Lot annex, with observed concentrations of 3 mg/L and 4 mg/L, respectively. All organic concentrations were below the method detection limit for each organic parameter. Heavy metal concentrations did not exceed the appropriate NYSGWS in the ground water from MW10 and MW11.

A shallow soil location resampled in Area P (F1) exhibited an EP Toxic lead concentration that would not classify the soil as a hazardous waste.

MW8 and MW9 were installed in the alleged disposal area (Area I). Metal concentrations in the soil borings from the wells were below EP Toxic Concentrations and generally were lower than the metal concentrations observed in the F and P areas. Low concentrations of several semi-volatile organics were detected in the borings from MW9, presumably from the asphalt fill material observed.

All volatile and semi-volatile organics analyzed for in the ground water from monitoring wells MW8 and MW9 were below the method detection limits. Heavy metals were not detected in MW8 and MW9. O&G concentrations in the ground water from MW8 and MW9 were 9 mg/L and 4 mg/L, respectively.

Two soil samples (H1, H2/H3) were taken from the asphalt paved loading dock area (Area H). The lead concentrations from these samples were below EP Toxic concentrations and all remaining metal concentrations were similar to background. A xylene concentration of 20 ppb was detected in the strata (6ft.-9ft.) from location H1, which is an order of magnitude below the xylene concentration observed at the shallow soil sample (1ft.-3ft.) from this location. Location H2/H3 exhibited residual concentrations of fluoranthene and phenanthene. The O&G concentration from the strata (6ft.-9ft.) at location H1 was less than 1 ppm, compared to 8,100 ppm exhibited at the shallow soil strata (1ft.-3ft.) from this location. The O&G concentration observed from the strata (5') at location H2/H3 was similar to the O&G concentrations observed from the shallow soil samples (1ft.-3ft.) taken from locations H2 and H3.

A cyanide concentration of 14 ppm was detected in one of five soil samples taken from the old heat treating area (Area K). This cyanide value is substantially less than the previous cyanide value (694 ppm) obtained in this area.

The Hazard Ranking System score for the site documented in the August 1986 report was reviewed using the additional results presented in this Report Addendum and remains as 2.18.

Respectfully submitted,

O'BRIEN & GERE ENGINEERS, INC.

Steven R. Garver

Steven R. Garver, P.E.
Vice President

Prepared by:

John Rinko, Jr.
John J. LaManche

# Tables

O'BRIEN & GERE

PRESTOLITE ELECTRIC, INCORPORATED
GROUND WATER QUALITY RESULTS

TABLE 1A

| WELL NUMBER | NYS Class | MW1 | | | | | MW2 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLING DATE* | GA STDS | 10/24/85 | 12/22/86 | 03/02/87 | 06/05/87 | 11/19/87 | 10/24/85 | 12/22/86 | 03/02/87 | 06/04/87 | 11/19/87 |
| | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| METALS | | | | | | | | | | | |
| | | F | UNF | F | F | F | F | UNF | F | F | F |
| Arsenic | 0.025 | <0.01 | NA | NA | NA | NA | <0.01 | NA | NA | NA | NA |
| Cadmium | 0.01 | <0.01 | 0.02 | <0.01 | 0.01 | NA | <0.01 | <0.01 | <0.01 | <0.01 | NA |
| Chromium (tot) | | <0.01 | <0.05 | <0.05 | <0.05 | NA | <0.01 | <0.05 | <0.05 | <0.05 | NA |
| Copper | 1 | <0.01 | 0.07 | 0.03 | 0.04 | NA | <0.01 | 0.04 | 0.01 | <0.01 | NA |
| Lead | 0.025 | <0.01 | 0.26 | 0.05 | 0.13@ | <0.025 | <0.01 | 0.13 | <0.05 | 0.07@ | <0.025 |
| Mercury | 0.002 | <0.0005 | NA | NA | NA | NA | <0.0005 | NA | NA | NA | NA |
| Nickel | | <0.01 | NA | <0.05 | 0.06 | NA | <0.01 | NA | <0.05 | <0.05 | NA |
| Selenium | 0.02 | <0.01 | NA | NA | NA | NA | <0.01 | NA | NA | NA | NA |
| Silver | 0.05 | 0.03 | NA | NA | NA | NA | 0.02 | NA | NA | NA | NA |
| Zinc | 5 | <0.01 | 0.06 | 0.01 | 0.02 | NA | 0.03 | 0.10 | 0.01 | <0.01 | NA |
| Iron | 0.3 | NA | 94 | 0.06 | <0.05 | NA | NA | 25 | <0.05 | <0.05 | NA |
| pH # | 6.5-8.5 | NA | 8.2 | 8.8 | 8.2 | 6.7 | NA | 7.4 | 6.4 | 6.8 | 6.6 |
| Specific Cond ## | | NA | 1980 | 1810 | 1820 | 1800 | NA | 890 | 360 | 765 | 950 |
| Cyanide (total) | 0.2 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 |
| Phenol | 0.001 | NA | 0.007 | 0.006 | <0.001 | 0.004 | NA | 0.002 | <0.001 | <0.001 | 0.001 |
| Oil & Grease | | NA | 3 | NA | 1. | NA | NA | 6 | NA | 3. | NA |
| TOC | | NA | 110 | NA | 260. | NA | NA | 40 | NA | 52. | NA |
| TOX + | | NA | <10/<10 | NA | 11./<10. | NA | NA | 12/<10 | NA | <10./<10. | NA |
| Depth to Groundwater (feet) | | 16.1 | | | | | 10.6 | | | | |

NOTES: # Results expressed as Standard Units.

## Results expressed as umhos/cm @ 25 degrees C.

* Note: Phase I sampling on 10/24/85.
Phase II sampling on 12/22/86, 3/2/87, 6/4/87, and either 9/28/87 (MWs 6 and 7) or 11/19/87 (MWs 1-5, 8, and 10-11).

** Note: Monitoring Wells No. 6 and 7 installed 10/86, initial sampling (11/26/86) analysis performed by OBG Labs. Resampling (12/22/86) analyses performed by both OBG Labs and Upstate Labs.

*** Note: Monitoring Wells No. 8 through No. 11 installed 5/87.

\+ Note: All TOX concentrations are in parts per billion (ppb).

F = Metals analyses following field filtration.

UNF = Metals analyses unfiltered.

@ = Lead concentrations for 06/05/87 are anomalous, possibly due to procedural error.

PRESTOLITE ELECTRIC, INCORPORATED
GROUND WATER QUALITY RESULTS

TABLE 1A (cont.)

| WELL NUMBER | NYS Class | MW3 | | | | | MW4 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLING DATE* | GA STDS | 10/24/85 | 12/22/86 | 03/02/87 | 06/04/87 | 11/19/87 | 10/24/85 | 12/22/86 | 03/02/87 | 06/04/87 | 11/19/87 |
| | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| METALS | | | | | | | | | | | |
| | | F | UNF | F | F | F | F | UNF | F | F | F |
| Arsenic | 0.025 | <0.01 | NA | NA | NA | NA | <0.01 | NA | NA | NA | NA |
| Cadmium | 0.01 | <0.01 | 0.01 | <0.01 | <0.01 | NA | <0.01 | <0.01 | <0.01 | <0.01 | NA |
| Chromium (tot) | | <0.01 | <0.05 | <0.05 | <0.05 | NA | <0.01 | <0.05 | <0.05 | <0.05 | NA |
| Copper | 1 | <0.01 | 0.04 | 0.02 | <0.01 | NA | <0.01 | 0.02 | <0.01 | 0.02 | NA |
| Lead | 0.025 | <0.01 | 0.18 | <0.05 | 0.09@ | <0.025 | <0.01 | 0.16 | <0.05 | 0.06@ | <0.025 |
| Mercury | 0.002 | <0.0005 | NA | NA | NA | NA | <0.0005 | NA | NA | NA | NA |
| Nickel | | <0.01 | NA | <0.05 | <0.05 | NA | <0.01 | NA | <0.05 | <0.05 | NA |
| Selenium | 0.02 | <0.01 | NA | NA | NA | NA | <0.01 | NA | NA | NA | NA |
| Silver | 0.05 | <0.01 | NA | NA | NA | NA | <0.01 | NA | NA | NA | NA |
| Zinc | 5 | 0.04 | 0.06 | 0.01 | <0.01 | NA | 0.03 | 0.05 | <0.01 | 0.01 | NA |
| Iron | 0.3 | NA | 29 | <0.05 | <0.05 | NA | NA | 11 | <0.05 | <0.05 | NA |
| pH # | 6.5-8.5 | NA | 7.5 | 7.2 | 6.3 | 6.6 | NA | 7.6 | 7.4 | 6.5 | 6.5 |
| Specific Cond ## | | NA | 790 | 570 | 790 | 850 | NA | 730 | 560 | 560 | 620 |
| Cyanide (total) | 0.2 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 |
| Phenol | 0.001 | NA | <0.001 | NA | <0.001 | NA | NA | <0.001 | NA | <0.001 | NA |
| Oil & Grease | | NA | 8 | NA | 2. | NA | NA | <1 | NA | 3. | NA |
| TOC | | NA | 110 | NA | 120. | NA | NA | 41 | NA | 57. | NA |
| TOX + | | NA | 25/<10 | NA | <10./<10. | NA | NA | <10/<10 | NA | <10./<10. | NA |
| Depth to Groundwater (feet) | | 10.2 | | | | | 11.6 | | | | |

NOTES: # Results expressed as Standard Units.

## Results expressed as umhos/cm @ 25 degrees C.

* Note: Phase I sampling on 10/24/85.
Phase II sampling on 12/22/86, 3/2/87, 6/4/87, and either 9/28/87 (MWs 6 and 7) or 11/19/87 (MWs 1-5, 8, and 10-11).

** Note: Monitoring Wells No. 6 and 7 installed 10/86, initial sampling (11/26/86) analysis performed by OBG Labs. Resampling (12/22/86) analyses performed by both OBG Labs and Upstate Labs.

*** Note: Monitoring Wells No. 8 through No. 11 installed 5/87.

\+ Note: All TOX concentrations are in parts per billion (ppb).

F = Metals analyses following field filtration.

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PRESTOLITE ELECTRIC, INCORPORATED
GROUND WATER QUALITY RESULTS

TABLE 1A (cont.)

| WELL NUMBER | NYS Class | MW5 | | | | | MW6** | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLING DATE* | GA STDS | 10/24/85 | 12/22/86 | 03/02/87 | 06/05/87 | 11/19/87 | 11/26/86 | 12/22/86 | 12/22/86 | 03/02/87 | 06/05/87 | 09/28/87 |
| | ppm | ppm | ppm | ppm | ppm | ppm | ppm OBG | ppm OBG | ppm Upstate | ppm OBG | ppm OBG | ppm OBG |
| METALS | | | | | | | | | | | | |
| | | F | UNF | F | F | F | F | UNF | UNF | F | F | F |
| Arsenic | 0.025 | <0.01 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cadmium | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | NA | <0.05 | <0.01 | <0.005 | <0.01 | <0.01 | <0.01 |
| Chromium (tot) | | <0.01 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Copper | 1 | <0.01 | 0.08 | <0.01 | 0.01 | NA | <0.05 | 0.04 | 0.03 | 0.03 | 0.01 | <0.01 |
| Lead | 0.025 | <0.01 | 0.35 | <0.05 | 0.13@ | <0.025 | NA | NA | NA | <0.05 | 0.05@ | <0.05 |
| Mercury | 0.002 | <0.0005 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nickel | | <0.01 | NA | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.02 | <0.05 | <0.05 | <0.05 |
| Selenium | 0.02 | <0.01 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Silver | 0.05 | <0.01 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Zinc | 5 | 0.03 | 0.25 | 0.01 | 0.01 | NA | <0.05 | 0.09 | 0.04 | 0.02 | 0.01 | <0.01 |
| Iron | 0.3 | NA | 110 | 0.21 | 0.1 | NA | NA | NA | NA | 0.85 | <0.05 | NA |
| pH # | 6.5-8.5 | NA | 7.4 | 7.4 | 6.2 | 6.6 | NA | 7.8 | 7.3 | 7.3 | 6.5 | 6.3 |
| Specific Cond ## | | NA | 1610 | 850 | 1220 | 1300 | NA | 1050 | 1100 | 510 | 760 | 800 |
| Cyanide (total) | 0.2 | <0.05 | <0.05 | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.01 | NA | <0.05 | <0.05 |
| Phenol | 0.001 | NA | <0.001 | NA | <0.001 | NA | 0.002 | <0.001 | 0.013 | NA | <0.001 | 0.004 |
| Oil & Grease | | NA | 1 | NA | 6. | NA | 1 | <1 | <5 | NA | 3. | <1 |
| TOC | | NA | 130 | NA | | NA | 24 | 21 | NA | NA | 190. | 87 |
| TOX + | | NA | <10/<10 | NA | 46. | NA | 30/31 | 96/90 | NA | NA | 100./97. | 110/1 |
| Depth to Groundwater (feet) | | 13.7 | | | | | | | | | | 7.2 |

NOTES: # Results expressed as Standard Units.

## Results expressed as umhos/cm @ 25 degrees C.

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*** Note: Monitoring Wells No. 8 through No. 11 installed 5/87.

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PRESTOLITE ELECTRIC, INCORPORATED
GROUND WATER QUALITY RESULTS

TABLE 1A (cont.)

| WELL NUMBER | NYS Class | MW7** | | | | | | MW8*** | |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLING DATE* | GA STDS | 11/26/86 | 12/22/86 | 12/22/86 | 03/02/87 | 06/05/87 | 09/28/87 | 06/05/87 | 11/19/87 |
| | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| | | OBG | OBG | Upstate | OBG | OBG | OBG | OBG | |
| METALS | | | | | | | | | |
| | | F | UNF | UNF | F | F | F | F | F |
| Arsenic | 0.025 | NA | NA | NA | NA | NA | NA | <0.005 | NA |
| Cadmium | 0.01 | <0.05 | 0.02 | <0.005 | <0.01 | <0.01 | <0.01 | <0.01 | NA |
| Chromium (tot) | | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA |
| Copper | 1 | <0.05 | 0.07 | 0.41 | <0.01 | 0.01 | <0.01 | NA | NA |
| Lead | 0.025 | NA | NA | NA | <0.05 | <0.05 | <0.05 | 0.07@ | <0.025 |
| Mercury | 0.002 | NA | NA | NA | NA | NA | NA | <0.0005 | NA |
| Nickel | | <0.05 | 0.22 | 0.06 | <0.05 | <0.05 | <0.05 | NA | NA |
| Selenium | 0.02 | NA | NA | NA | NA | NA | NA | <0.005 | NA |
| Silver | 0.05 | NA | NA | NA | NA | NA | NA | <0.01 | NA |
| Zinc | 5 | <0.05 | 0.61 | 0.78 | <0.01 | 0.02 | <0.01 | NA | NA |
| Iron | 0.3 | NA | NA | NA | 1.4 | 0.5 | NA | NA | NA |
| pH # | 6.5-8.5 | NA | 7.7 | 7.3 | 6.6 | 8.5 | 6.7 | 6.7 | 6.6 |
| Specific Cond ## | | NA | 1000 | 990 | 690 | 750 | 700 | 1020 | 800 |
| Cyanide (total) | 0.2 | 0.43 | 0.14 | 0.10 | 0.21 | 3.8 | <0.05 | <0.05 | <0.05 |
| Phenol | 0.001 | 0.056 | 0.014 | 0.015 | 0.011 | 0.009 | <0.001 | NA | NA |
| Oil & Grease | | 13 | 12 | <5 | NA | 9. | 1 | 9. | NA |
| TOC | | 400 | 200 | NA | NA | 240. | 72 | 240. | NA |
| TOX + | | 25/17 | 34/19 | NA | NA | 53./48. | 23/33 | 19./24. | NA |
| Depth to Groundwater (feet) | | | | | | | 6 | | |

NOTES: # Results expressed as Standard Units.

## Results expressed as umhos/cm @ 25 degrees C.

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PRESTOLITE ELECTRIC, INCORPORATED
GROUND WATER QUALITY RESULTS

TABLE 1A (cont.)

| WELL NUMBER | NYS Class | MW9*** | MW10*** | | MW11*** | |
|---|---|---|---|---|---|---|
| SAMPLING DATE* | GA STDS | 06/05/87 | 06/05/87 | 11/19/87 | 06/05/87 | 11/19/87 |
| | ppm | ppm OBG | ppm OBG | ppm | ppm OBG | ppm |
| METALS | | | | | | |
| | | F | F | F | F | F |
| Arsenic | 0.025 | <0.005 | NA | NA | NA | NA |
| Cadmium | 0.01 | <0.01 | <0.01 | NA | <0.01 | NA |
| Chromium (tot) | | <0.05 | <0.05 | NA | <0.05 | NA |
| Copper | 1 | NA | <0.01 | NA | <0.01 | NA |
| Lead | 0.025 | 0.09@ | 0.07@ | <0.025 | 0.11@ | <0.025 |
| Mercury | 0.002 | <0.0005 | NA | NA | NA | NA |
| Nickel | | NA | <0.05 | NA | <0.05 | NA |
| Selenium | 0.02 | <0.005 | NA | NA | NA | NA |
| Silver | 0.05 | <0.01 | NA | NA | NA | NA |
| Zinc | 5 | NA | <0.01 | NA | 0.01 | NA |
| Iron | 0.3 | NA | <0.05 | NA | <0.05 | NA |
| pH # | 6.5-8.5 | 6.6 | 6.7 | 6.7 | 6.6 | 6.5 |
| Specific Cond ## | | 1000 | 630 | 750 | 1320 | 1600 |
| Cyanide (total) | 0.2 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Phenol | 0.001 | NA | NA | NA | NA | NA |
| Oil & Grease | | 4. | 3. | NA | 4. | NA |
| TOC | | 260. | 410. | NA | 130. | NA |
| TOX + | | 16./19. | 16./16. | NA | <10./<10. | NA |
| Depth to Groundwater (feet) | | | | | | |

NOTES: # Results expressed as Standard Units.

## Results expressed as umhos/cm @ 25 degrees C.

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*** Note: Monitoring Wells No. 8 through No. 11 installed 5/87.

\+ Note: All TOX concentrations are in parts per billion (ppb).

F = Metals analyses following field filtration.

UNF = Metals analyses unfiltered.

@ = Lead concentrations for 06/05/87 are anomalous, possibly due to procedural error.

PRESTOLITE ELECTRIC, INCORPORATED
GROUND WATER QUALITY RESULTS

TABLE 2A

| PARAMETER | MW-1 06/05/87 | MW-2 06/04/87 | MW-3 06/04/87 | MW-4 06/05/87 | MW-5 06/05/87 | MW-6 06/05/87 |
|---|---|---|---|---|---|---|
| VOLATILES (ppb) | | | | | | |
| 1 1,1,1-Trichloroethane | <5. | <5. | <5. | <5. | <5. | <5. |
| 2 1,1,2,2-Tetrachloroethane | <5. | <5. | <5. | <5. | <5. | <5. |
| 3 1,1,2-Trichloroethane | <5. | <5. | <5. | <5. | <5. | <5. |
| 4 1,1-Dichloroethane | <5. | <5. | <5. | <5. | <5. | <5. |
| 5 1,1-Dichloroethene | <5. | <5. | <5. | <5. | <5. | <5. |
| 6 1,2-Dichloroethane | <5. | <5. | <5. | <5. | <5. | <5. |
| 7 1,2-Dichloropropane | <5. | <5. | <5. | <5. | <5. | <5. |
| 10 2-Chloroethylvinyl ether | <10. | <10. | <10. | <10. | <10. | <10. |
| 14 Benzene | <5. | <5. | <5. | <5. | <5. | <5. |
| 16 Bromodichloromethane | <5. | <5. | <5. | <5. | <5. | <5. |
| 17 Bromoform | <5. | <5. | <5. | <5. | <5. | <5. |
| 18 Bromomethane | <10. | <10. | <10. | <10. | <10. | <10. |
| 19 c-1,3-Dichloropropene | <5. | <5. | <5. | <5. | <5. | <5. |
| 21 Carbon tetrachloride | <5. | <5. | <5. | <5. | <5. | <5. |
| 22 Chlorobenzene | <5. | <5. | <5. | <5. | <5. | <5. |
| 23 Chloroethane | <10. | <10. | <10. | <10. | <10. | <10. |
| 24 Chloroform | <5. | <5. | <5. | <5. | <5. | <5. |
| 25 Chloromethane | <10. | <10. | <10. | <10. | <10. | <10. |
| 26 Dibromochloromethane | <5. | <5. | <5. | <5. | <5. | <5. |
| 28 Ethylbenzene | <5. | <5. | <5. | <5. | <5. | <5. |
| 29 Methylene Chloride | <5. | <5. | <5. | <5. | <5. | <5. |
| 35 t-1,2-Dichloroethene | <5. | <5. | <5. | <5. | <5. | <5. |
| 36 t-1,3-Dichloropropene | <5. | <5. | <5. | <5. | <5. | <5. |
| 37 Tetrachloroethene | <5. | <5. | <5. | <5. | <5. | <5. |
| 38 Toluene | <5. | <5. | <5. | <5. | <5. | <5. |
| 39 Total Xylenes | <5. | <5. | <5. | <5. | <5. | <5. |
| 40 Trichloroethene | <5. | <5. | <5. | <5. | <5. | <5. |
| 43 Vinyl chloride | <10. | <10. | <10. | <10. | <10. | <10. |

PRESTOLITE ELECTRIC, INCORPORATED
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TABLE 2A (cont'd)

| PARAMETER | MW-7 06/05/87 | MW-8 06/05/87 | MW-9 06/05/87 | MW-10 06/05/87 | MW-11 06/05/87 |
|---|---|---|---|---|---|
| VOLATILES (ppb) | | | | | |
| 1 1,1,1-Trichloroethane | <5. | <5. | <5. | <5. | <5. |
| 2 1,1,2,2-Tetrachloroethane | <5. | <5. | <5. | <5. | <5. |
| 3 1,1,2-Trichloroethane | <5. | <5. | <5. | <5. | <5. |
| 4 1,1-Dichloroethane | <5. | <5. | <5. | <5. | <5. |
| 5 1,1-Dichloroethene | <5. | <5. | <5. | <5. | <5. |
| 6 1,2-Dichloroethane | <5. | <5. | <5. | <5. | <5. |
| 7 1,2-Dichloropropane | <5. | <5. | <5. | <5. | <5. |
| 10 2-Chloroethylvinyl ether | <10. | <10. | <10. | <10. | <10. |
| 14 Benzene | <5. | <5. | <5. | <5. | <5. |
| 16 Bromodichloromethane | <5. | <5. | <5. | <5. | <5. |
| 17 Bromoform | <5. | <5. | <5. | <5. | <5. |
| 18 Bromomethane | <10. | <10. | <10. | <10. | <10. |
| 19 c-1,3-Dichloropropene | <5. | <5. | <5. | <5. | <5. |
| 21 Carbon tetrachloride | <5. | <5. | <5. | <5. | <5. |
| 22 Chlorobenzene | <5. | <5. | <5. | <5. | <5. |
| 23 Chloroethane | <10. | <10. | <10. | <10. | <10. |
| 24 Chloroform | <5. | <5. | <5. | <5. | <5. |
| 25 Chloromethane | <10. | <10. | <10. | <10. | <10. |
| 26 Dibromochloromethane | <5. | <5. | <5. | <5. | <5. |
| 28 Ethylbenzene | <5. | <5. | <5. | <5. | <5. |
| 29 Methylene Chloride | <5. | <5. | <5. | <5. | <5. |
| 35 t-1,2-Dichloroethene | <5. | <5. | <5. | <5. | <5. |
| 36 t-1,3-Dichloropropene | <5. | <5. | <5. | <5. | <5. |
| 37 Tetrachloroethene | <5. | <5. | <5. | <5. | <5. |
| 38 Toluene | <5. | <5. | <5. | <5. | <5. |
| 39 Total Xylenes | <5. | <5. | <5. | <5. | <5. |
| 40 Trichloroethene | <5. | <5. | <5. | <5. | <5. |
| 43 Vinyl chloride | <10. | <10. | <10. | <10. | <10. |

PRESTOLITE ELECTRIC, INCORPORATED
GROUND WATER QUALITY RESULTS

TABLE 2A (cont'd)

| Sample Date | MW-7 06/05/87 | MW-8 06/05/87 | MW-9 06/05/87 | MW-10 06/05/87 | MW-11 06/05/87 |
|---|---|---|---|---|---|
| PARAMETER | | | | | |
| SEMI-VOLATILES (ppb) | | | | | |
| 44 1,2,4-Trichlorobenzene | | <10. | <10. | | |
| 45 1,2-Dichlorobenzene | | <10. | <10. | | |
| 46 1,2-Diphenylhydrazine | | <10. | <10. | | |
| 47 1,3-Dichlorobenzene | | <10. | <10. | | |
| 48 1,4-Dichlorobenzene | | <10. | <10. | | |
| 50 2,4,6-Trichlorophenol | | <10. | <10. | | |
| 51 2,4-Dichlorophenol | | <10. | <10. | | |
| 52 2,4-Dimethylphenol | | <10. | <10. | | |
| 53 2,4-Dinitrophenol | | <50. | <50. | | |
| 54 2,4-Dinitrotoluene | | <10. | <10. | | |
| 55 2,6-Dinitrotoluene | | <10. | <10. | | |
| 56 2-Chloronaphthalene | | <10. | <10. | | |
| 57 2-Chlorophenol | | <10. | <10. | | |
| 59 2-Methyl-4,6-dinitrophenol | | <50. | <50. | | |
| 63 2-Nitrophenol | | <10. | <10. | | |
| 64 3,3-Dichlorobenzidine | | <20. | <20. | | |
| 66 4-Bromophenyl phenyl ether | | <10. | <10. | | |
| 68 4-Chloro-3-methylphenol | | <10. | <10. | | |
| 69 4-Chlorophenyl phenyl ether | | <10. | <10. | | |
| 72 4-Nitrophenol | | <50. | <50. | | |
| 73 Acenaphthalene | | <10. | <10. | | |
| 74 Acenaphthene | | <10. | <10. | | |
| 76 Anthracene | | <10. | <10. | | |
| 77 Benzidine | | <50. | <50. | | |
| 78 Benzo(a)anthracene | | <10. | <10. | | |
| 79 Benzo(a)pyrene | | <10. | <10. | | |
| 80 Benzo(b)fluoranthene | | <10. | <10. | | |
| 81 Benzo(g,h,i)perylene | | <10. | <10. | | |
| 82 Benzo(k)fluoranthene | | <10. | <10. | | |
| 85 Bis (2-chloroethoxy) methane | | <10. | <10. | | |
| 86 Bis (2-chloroethyl) ether | | <10. | <10. | | |
| 87 Bis (2-chloroisopropyl) ether | | <10. | <10. | | |
| 88 Bis (2-ethylhexyl) phthalate | | <10. | <10. | | |
| 89 Butyl benzyl phthalate | | <10. | <10. | | |
| 90 Chrysene | | <10. | <10. | | |
| 91 Di-n-butyl phthalate | | <10. | <10. | | |
| 92 Di-n-octylphthalate | | <10. | <10. | | |
| 93 Dibenzo(a,h)anthracene | | <10. | <10. | | |
| 95 Diethylphthalate | | <10. | <10. | | |
| 96 Dimethyl phthalate | | <10. | <10. | | |
| 97 Fluoranthene | | <10. | <10. | | |
| 98 Fluorene | | <10. | <10. | | |
| 99 Hexachlorobenzene | | <10. | <10. | | |
| 100 Hexachlorobutadiene | | <10. | <10. | | |
| 101 Hexachlorocyclopentadiene | | <10. | <10. | | |
| 102 Hexachloroethane | | <10. | <10. | | |
| 103 Indeno(1,2,3-cd)pyrene | | <10. | <10. | | |
| 104 Isophorone | | <10. | <10. | | |
| 105 N-Nitrosodi-n-propylamine | | <10. | <10. | | |
| 106 N-Nitrosodimethylamine | | <10. | <10. | | |
| 107 N-nitrosodiphenylamine | | <10. | <10. | | |
| 108 Naphthalene | | <10. | <10. | | |
| 109 Nitrobenzene | | <10. | <10. | | |
| 110 Pentachlorophenol | | <50. | <50. | | |
| 112 Phenanthrene | | <10. | <10. | | |
| 113 Phenol | | <10. | <10. | | |
| 114 Pyrene | | <10. | <10. | | |

PRESTOLITE ELECTRIC, INCORPORATED
SOILS ANALYSES RESULTS

TABLE 3A

| PARAMETER | UNITS ** | SAMPLE / DATE / DEPTH | D3 5/27/87 0' | D3 5/27/87 2' | D3 5/27/87 4' | D4 5/27/87 0' | D4 5/27/87 2' | D4 5/27/87 4' | D5 5/27/87 0' | D5 5/27/87 2' | D5 5/27/87 4' |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ppm | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Barium | ppm | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cadmium | ppm | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chromium | ppm | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Copper | ppm | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Lead | ppm | | 140 | 230 | 59 | 69 | 56 | 27 | 210 | 37 | 59 |
| Mercury | ppm | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Selenium | ppm | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Silver | ppm | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzene | ppb | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cyanide | ppm | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | ppb | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Oil & Grease | ppm | | 42 | 410 | 400 | 520 | 320 | 230 | 560 | 230 | 190 |
| Phenols | ppm | | 0.4 | 0.2 | 2.1 | 0.3 | 0.1 | <0.1 | 0.7 | 0.1 | <0.1 |
| Toluene | ppb | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes | ppb | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

NOTES:

NA = Not Analyzed For
\+ = Denotes EP TOX value
** = All concentrations are on a wet weight basis.

- "Resamp" indicates resampling of Phase II Initial Investigation locations at identical depth for EP Toxic lead, for comparison to previous total lead analyses. See Table 8, Phase II Initial Investigation Report, August 1986.

- Location E1 not resampled, previous location not determined.

- Locations E5 and E6 are outside of concrete structures.

PRESTOLITE ELECTRIC, INCORPORATED
SOILS ANALYSES RESULTS

TABLE 3A (cont.)

| PARAMETER | UNITS ** | SAMPLE<br>DATE<br>DEPTH | E2<br>5/26/87<br>2' | E2 Resamp<br>5/26/87<br>14'-16.5' | E3<br>5/26/87<br>2' | E3 Resamp<br>5/26/87<br>10'-20'Comp | E4<br>5/26/87<br>2' | E4 Resamp<br>5/26/87<br>18'-20.5' | E5<br>5/26/87<br>10' | E6<br>5/26/87<br>10' |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Barium | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Cadmium | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Chromium | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Copper | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Lead | ppm | | 0.71 + | 0.25 + | 0.73 + | 0.86 + | 0.67 + | 0.56 + | 0.40 + | 0.35 + |
| Mercury | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Selenium | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Silver | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzene | ppb | | NA | NA | NA | NA | NA | NA | NA | NA |
| Cyanide | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | ppb | | NA | NA | NA | NA | NA | NA | NA | NA |
| Oil & Grease | ppm | | 790 | 34 | 550 | 1300 | 910 | 710 | <1. | <1. |
| Phenols | ppm | | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | ppb | | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes | ppb | | NA | NA | NA | NA | NA | NA | NA | NA |

NOTES:

NA = Not Analyzed For
\+ = Denotes EP TOX value
** = All concentrations are on a wet weight basis.

- "Resamp" indicates resampling of Phase II Initial Investigation locations at identical depth for EP Toxic lead, for comparison to previous total lead analyses. See Table 8, Phase II Initial Investigation Report, August 1986.

- Location E1 not resampled, previous location not determined.

- Locations E5 and E6 are outside of concrete structures.

PRESTOLITE ELECTRIC, INCORPORATED
SOILS ANALYSES RESULTS

TABLE 3A (cont.)

| PARAMETER | UNITS ** | SAMPLE<br>DATE<br>DEPTH | F1<br>5/27/87<br>Surface | K1<br>5/26/87<br>2' | K1<br>5/26/87<br>4' | K2<br>5/26/87<br>2' | K3<br>5/26/87<br>Surface | K4<br>5/26/87<br>Surface | K5<br>5/26/87<br>Surface |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ppm | | NA | 23 | 18 | 38 | 4.4 | 5.4 | 4.4 |
| Barium | ppm | | NA | <50. | <50. | <50. | 140. | 90 | 180 |
| Cadmium | ppm | | NA | 3 | 2 | 2. | 10. | 6 | 4 |
| Chromium | ppm | | NA | 36 | 18 | 11. | 14. | 18 | 9 |
| Copper | ppm | | NA | NA | NA | NA | NA | NA | NA |
| Lead | ppm | | 0.19 + | 72 | 59 | 23. | 110. | 250 | 84 |
| Mercury | ppm | | NA | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Selenium | ppm | | NA | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Silver | ppm | | NA | <1. | <1. | 1 | 3 | 3 | 3 |
| Benzene | ppb | | NA | NA | NA | NA | NA | NA | NA |
| Cyanide | ppm | | NA | 14 | <5. | <5. | <5. | <5. | <5. |
| Ethylbenzene | ppb | | NA | NA | NA | NA | NA | NA | NA |
| Oil & Grease | ppm | | NA | 940 | 360 | 250 | 470 | 1500 | 1500 |
| Phenols | ppm | | NA | NA | NA | NA | NA | NA | NA |
| Toluene | ppb | | NA | NA | NA | NA | NA | NA | NA |
| Xylenes | ppb | | NA | NA | NA | NA | NA | NA | NA |

NOTES:

NA = Not Analyzed For
+ = Denotes EP TOX value
** = All concentrations are on a wet weight basis.

- "Resamp" indicates resampling of Phase II Initial Investigation locations at identical depth for EP Toxic lead, for comparison to previous total lead analyses. See Table 8, Phase II Initial Investigation Report, August 1986.

- Location E1 not resampled, previous location not determined.

- Locations E5 and E6 are outside of concrete structures.

PRESTOLITE ELECTRIC, INCORPORATED
SOILS ANALYSES RESULTS

TABLE 3A (cont.)

| PARAMETER | UNITS ** | SAMPLE<br>DATE<br>DEPTH | MW-10<br>5/22/87<br>2'-4' | MW-10<br>5/22/87<br>6'-8' | MW-11<br>5/22/87<br>4'-6' | MW-11<br>5/27/87<br>21'-22' |
|---|---|---|---|---|---|---|
| Arsenic | ppm | | 3.8 | 7.4 | 9.1 | 9.0 |
| Barium | ppm | | <50. | 70. | <50. | <50. |
| Cadmium | ppm | | 1. | 3. | 2. | 2. |
| Chromium | ppm | | <5. | 6. | 6. | 11. |
| Copper | ppm | | 8. | 13. | 24. | NA |
| Lead | ppm | | 11. | 25. | 24. | 79. |
| Mercury | ppm | | <0.5 | <0.5 | <0.5 | <0.5 |
| Selenium | ppm | | <0.5 | <0.5 | <0.5 | <0.5 |
| Silver | ppm | | <1. | 1 | 1 | 1 |
| Benzene | ppb | | <10. | <10. | <10. | NA |
| Cyanide | ppm | | NA | NA | NA | <5. |
| Ethylbenzene | ppb | | <10. | <10. | <10. | NA |
| Oil & Grease | ppm | | 59 | 140 | <1. | 240 |
| Phenols | ppm | | NA | NA | NA | NA |
| Toluene | ppb | | <10. | <10. | <10. | NA |
| Xylenes | ppb | | <10. | <10. | <10. | NA |

NOTES:

NA = Not Analyzed For
+ = Denotes EP TOX value
** = All concentrations are on a wet weight basis.

- "Resamp" indicates resampling of Phase II Initial Investigation locations at identical depth for EP Toxic lead, for comparison to previous total lead analyses. See Table 8, Phase II Initial Investigation Report, August 1986.
- Location E1 not resampled, previous location not determined.
- Locations E5 and E6 are outside of concrete structures.

PRESTOLITE ELECTRIC, INCORPORATED
SOIL ANALYSES RESULTS

TABLE 4A

| PARAMETER | MW-8 05/22/87 0'-3' | MW-8 05/22/87 6'-8' | MW-9 05/22/87 0'-3' | MW-9 05/22/87 6'-8' | H1 05/22/87 6'-9' | H2/H3 05/22/87 5' |
|---|---|---|---|---|---|---|
| VOLATILES (ppb) | | | | | | |
| 1 1,1,1-Trichloroethane | 17.J | <20. | <25. | <25. | <25. | <20. |
| 2 1,1,2,2-Tetrachloroethane | <20. | <20. | <25. | <25. | <25. | <20. |
| 3 1,1,2-Trichloroethane | <20. | <20. | <25. | <25. | <25. | <20. |
| 4 1,1-Dichloroethane | <20. | <20. | <25. | <25. | <25. | <20. |
| 5 1,1-Dichloroethene | <20. | <20. | <25. | <25. | <25. | <20. |
| 6 1,2-Dichloroethane | <20. | <20. | <25. | <25. | <25. | <20. |
| 7 1,2-Dichloropropane | <20. | <20. | <25. | <25. | <25. | <20. |
| 10 2-Chloroethylvinyl ether | <40. | <40. | <50. | <50. | <50. | <40. |
| 14 Benzene | <20. | <20. | <25. | <25. | <25. | <20. |
| 16 Bromodichloromethane | <20. | <20. | <25. | <25. | <25. | <20. |
| 17 Bromoform | <20. | <20. | <25. | <25. | <25. | <20. |
| 18 Bromomethane | <40. | <40. | <50. | <50. | <50. | <40. |
| 19 c-1,3-Dichloropropene | <20. | <20. | <25. | <25. | <25. | <20. |
| 21 Carbon tetrachloride | <20. | <20. | <25. | <25. | <25. | <20. |
| 22 Chlorobenzene | <20. | <20. | <25. | <25. | <25. | <20. |
| 23 Chloroethane | <40. | <40. | <25. | <25. | <25. | <40. |
| 24 Chloroform | <20. | <20. | <25. | <25. | <25. | <20. |
| 25 Chloromethane | <40. | <40. | <50. | <50. | <50. | <40. |
| 26 Dibromochloromethane | <20. | <20. | <25. | <25. | <25. | <20. |
| 28 Ethylbenzene | <20. | <20. | <25. | <25. | <25. | <20. |
| 29 Methylene Chloride | <20. | <20. | <25. | <25. | <25. | <20. |
| 35 t-1,2-Dichloroethene | <20. | <20. | <25. | <25. | <25. | <20. |
| 36 t-1,3-Dichloropropene | <20. | <20. | <25. | <25. | <25. | <20. |
| 37 Tetrachloroethene | <20. | <20. | <25. | <25. | <25. | <20. |
| 38 Toluene | <20. | <20. | <25. | <25. | <25. | <20. |
| 39 Total Xylenes | <20. | <20. | <25. | <25. | 95. | <20. |
| 40 Trichloroethene | <20. | <20. | <25. | <25. | <25. | <20. |
| 43 Vinyl chloride | <40. | <40. | <50. | <50. | <50. | <40. |

NOTE:
J = detected but below method detection limit.

PRESTOLITE ELECTRIC, INCORPORATED
SOIL ANALYSES RESULTS

TABLE 4A (cont'd)

| PARAMETER | Sample / Date / Depth | MW-8 05/22/87 0'-3' | MW-8 05/22/87 6'-8' | MW-9 05/22/87 0'-3' | MW-9 05/22/87 6'-8' | H1 05/22/87 6'-9' | H2/H3 05/22/87 5' |
|---|---|---|---|---|---|---|---|
| SEMI-VOLATILES (ppb) | | | | | | | |
| 44 1,2,4-Trichlorobenzene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 45 1,2-Dichlorobenzene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 46 1,2-Diphenylhydrazine | | <330. | <330. | <330. | <330. | <330. | <330. |
| 47 1,3-Dichlorobenzene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 48 1,4-Dichlorobenzene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 50 2,4,6-Trichlorophenol | | <330. | <330. | <330. | <330. | <330. | <330. |
| 51 2,4-Dichlorophenol | | <330. | <330. | <330. | <330. | <330. | <330. |
| 52 2,4-Dimethylphenol | | <330. | <330. | <330. | <330. | <330. | <330. |
| 53 2,4-Dinitrophenol | | <1650. | <1650. | <1650. | <1650. | <1650. | <1650. |
| 54 2,4-Dinitrotoluene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 55 2,6-Dinitrotoluene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 56 2-Chloronaphthalene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 57 2-Chlorophenol | | <330. | <330. | <330. | <330. | <330. | <330. |
| 59 2-Methyl-4,6-dinitrophenol | | <1650. | <1650. | <1650. | <1650. | <1650. | <1650. |
| 63 2-Nitrophenol | | <330. | <330. | <330. | <330. | <330. | <330. |
| 64 3,3-Dichlorobenzidine | | <660. | <660. | <660. | <660. | <660. | <660. |
| 66 4-Bromophenyl phenyl ether | | <330. | <330. | <330. | <330. | <330. | <330. |
| 68 4-Chloro-3-methylphenol | | <330. | <330. | <330. | <330. | <330. | <330. |
| 69 4-Chlorophenyl phenyl ether | | <330. | <330. | <330. | <330. | <330. | <330. |
| 72 4-Nitrophenol | | <1650. | <1650. | <1650. | <1650. | <1650. | <1650. |
| 73 Acenaphthalene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 74 Acenaphthene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 76 Anthracene | | <330. | <330. | <330. | <330. | <330. | <330. |
| 77 Benzidine | | <1650. | <1650. | <1650. | <1650. | <1650. | <1650. |
| 78 Benzo(a)anthracene | | 240.J | <330. | 600. | <330. | <330. | 220.J |
| 79 Benzo(a)pyrene | | 110.J | <330. | 500. | <330. | <330. | 150.J |
| 80 Benzo(b)fluoranthene | | 190.J | <330. | 580. | <330. | <330. | 200.J |
| 81 Benzo(g,h,i)perylene | | <330. | <330. | 280.J | <330. | <330. | <330. |
| 82 Benzo(k)fluoranthene | | 180.J | <330. | 400. | <330. | <330. | <330. |
| 85 Bis (2-chloroethoxy) methane | | <330. | <330. | <330. | <330. | <330. | <330. |
| 86 Bis (2-chloroethyl) ether | | <330. | <330. | <330. | <330. | <330. | <330. |
| 87 Bis (2-chloroisopropyl) ether | | <330. | <330. | <330. | <330. | <330. | <330. |
| 88 Bis (2-ethylhexyl) phthalate | | 1250.B | 500.B | 1000.B | 690.B | 670.B | 630.B |
| 89 Butyl benzyl phthalate | | <330. | <330. | <330. | <330. | <330. | <330. |
| 90 Chrysene | | 220.J | <330. | 600. | <330. | <330. | 210.J |
| 91 Di-n-butyl phthalate | | <330. | <330. | <330. | <330. | <330. | <330. |
| 92 Di-n-octylphthalate | | <330. | <330. | <330. | <330. | <330. | <330. |

NOTE:

J = detected but below method detection limit.
B = method blank had 360 ppb of this compound.

PRESTOLITE ELECTRIC, INCORPORATED
SOIL ANALYSES RESULTS

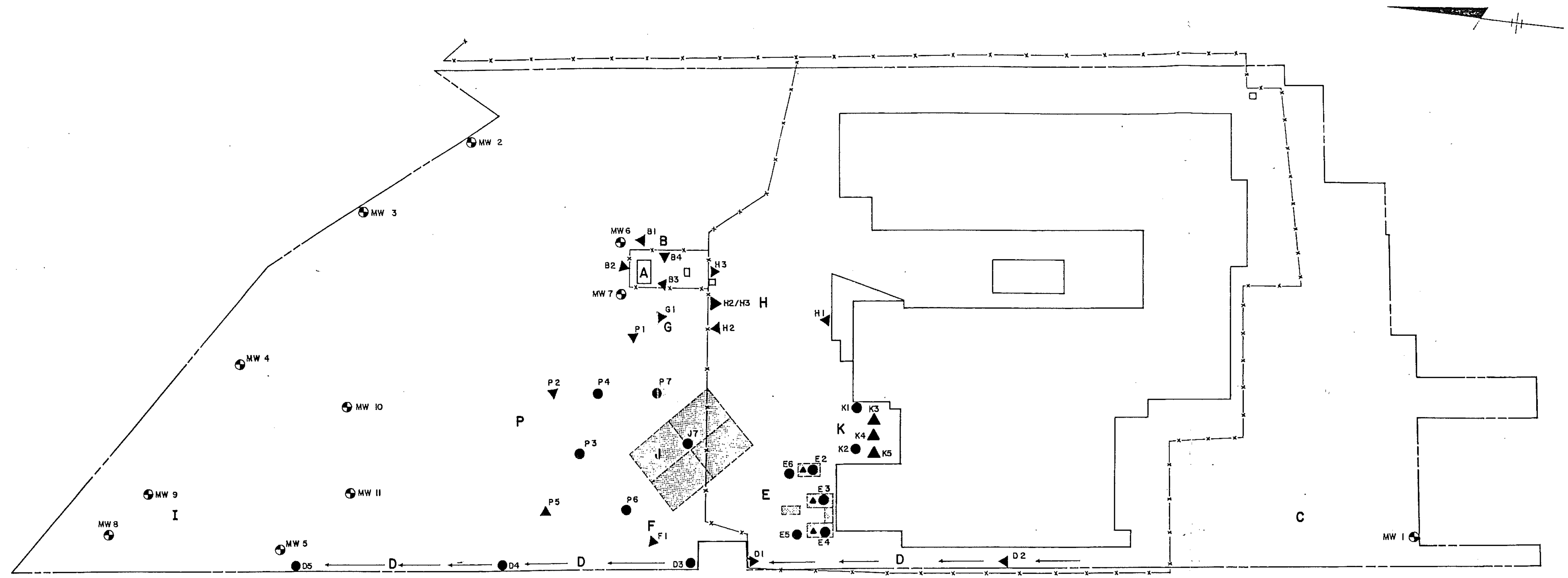
TABLE 4A (cont'd)

| Sample<br>Date<br>Depth | MW-8<br>05/22/87<br>0'-3' | MW-8<br>05/22/87<br>6'-8' | MW-9<br>05/22/87<br>0'-3' | MW-9<br>05/22/87<br>6'-8' | H1<br>05/22/87<br>6'-9' | H2/H3<br>05/22/87<br>5' |
|---|---|---|---|---|---|---|
| PARAMETER | | | | | | |
| SEMI-VOLATILES (ppb) | | | | | | |
| 93 Dibenzo(a,h)anthracene | <330. | <330. | <330. | <330. | <330. | <330. |
| 95 Diethylphthalate | <330. | <330. | <330. | <330. | <330. | <330. |
| 96 Dimethyl phthalate | <330. | <330. | <330. | <330. | <330. | <330. |
| 97 Fluoranthene | 260.J | <330. | 510. | <330. | <330. | 370. |
| 98 Fluorene | <330. | <330. | <330. | <330. | <330. | <330. |
| 99 Hexachlorobenzene | <330. | <330. | <330. | <330. | <330. | <330. |
| 100 Hexachlorobutadiene | <330. | <330. | <330. | <330. | <330. | <330. |
| 101 Hexachlorocyclopentadiene | <330. | <330. | <330. | <330. | <330. | <330. |
| 102 Hexachloroethane | <330. | <330. | <330. | <330. | <330. | <330. |
| 103 Indeno(1,2,3-cd)pyrene | <330. | <330. | 300.J | <330. | <330. | <330. |
| 104 Isophorone | <330. | <330. | <330. | <330. | <330. | <330. |
| 105 N-Nitrosodi-n-propylamine | <330. | <330. | <330. | <330. | <330. | <330. |
| 106 N-Nitrosodimethylamine | <330. | <330. | <330. | <330. | <330. | <330. |
| 107 N-nitrosodiphenylamine | <330. | <330. | <330. | <330. | <330. | <330. |
| 108 Naphthalene | <330. | <330. | <330. | <330. | <330. | <330. |
| 109 Nitrobenzene | <330. | <330. | <330. | <330. | <330. | <330. |
| 110 Pentachlorophenol | <1650. | <1650. | <1650. | <1650. | <1650. | <1650. |
| 112 Phenanthrene | 270.J | <330. | 420. | <330. | <330. | 330. |
| 113 Phenol | <330. | <330. | <330. | <330. | <330. | <330. |
| 114 Pyrene | 240.J | <330. | 690. | <330. | <330. | 250.J |
| METALS (ppm) | | | | | | |
| 160 Arsenic | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| 162 Barium | 1.0 | 1.7 | 0.9 | 1.0 | 0.9 | 1.6 |
| 166 Cadmium | 0.03 | 0.07 | 0.03 | <0.01 | <0.01 | 0.07 |
| 170 Chromium | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| 174 Copper | NA | NA | NA | NA | NA | NA |
| 178 Lead | 0.27 + | 0.56 + | 0.25 + | 0.07 + | <0.05 + | <0.05 + |
| 184 Mercury | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 |
| 190 Selenium | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| 192 Silver | 0.01 | 0.02 | 0.01 | <0.01 | <0.01 | 0.03 |
| OTHER (ppm) | | | | | | |
| Oil and Grease | NA | NA | NA | NA | <1. | 1330. |

NOTE:
J = detected but below method detection limit.

# Figures

O'BRIEN & GERE




| AREA | LOCATION |
|---|---|
| A. | Obsolete Waste Treatment Plant |
| B. | Adjacent Soils to Area A |
| C. | Alleged Disposal from Local Residents |
| D. | Drainage Ditch |
| E. | Eastwood Sewage Treatment Plant |
| F. | North Parking Lot Annex, Eastern Half |
| G. | North Parking Lot Annex, Western Half |
| H. | Loading Dock Area |
| I. | Alleged Disposal Area from Neighboring Industry |
| J. | Possible Section of Eastwood Sewage Treatment Plant |
| K. | Old Heat Treating Area |
| P. | Parking Lot Annex |

LEGEND

- DEEP SOIL SAMPLE
- SHALLOW SOIL SAMPLE
- MONITORING WELL
- APPROXIMATE LOCATION OF OLD MUNICIPAL PLANT

FIGURE IA

SITE MAP

PRESTOLITE ELECTRIC, INCORPORATED

SYRACUSE, NEW YORK

60 0 60

SCALE 1" = 60'

O'BRIEN & GERE

O'Brien & Gere Engineers, Inc

# Attachments

O'BRIEN & GERE

ATTACHMENT 1A

WORK PLAN
5/18/87

PHASE II SITE INVESTIGATION
PROPOSED WORK PLAN

PRESTOLITE CORPORATION
SYRACUSE, NEW YORK

Revised 5/18/87

1. Two ground water monitoring wells will be installed in the vicinity of the treatment system building. Wells will be completed using hollow stem auger drilling methods. Soil samples will be collected continuously to the bottom of the boring (7 feet below water table, estimated depth 25 feet). One soil sample from above the till layer and one from below the till layer will be transported to the laboratory for analysis. ANALYTICAL PARAMETERS: CN, O&G, Cd, Cr, Cu, Ni, Zn, and volatile organics (method 624).

   The wells will be constructed of 10-foot lengths of .010" slot. 2" diameter PVC attached to solid pvc riser casing. A steel locking cover will be placed over the pvc to protect it from damage.

   Ground water samples will be collected from these two wells in accordance with accepted procedures. ANALYTICAL PARAMETERS: pH, specific conductance, TOC, TOX, CN, O&G, phenol, Cd, Cr, Fe, Pb, Cu, Ni, Zn, and volatile organics (method 624).

2. A second round of ground water samples will be collected from the five existing wells. ANALYTICAL PARAMETERS: pH, specific conductance, TOC, TOX, Cn, O&G, Phenol, Cd, Cr, Cu, Zn, Fe, Pb, Ni, and volatile organics (method 624).

3. One 4 foot boring will be completed in area K. Soil samples from 2 feet and 4 feet will be collected for analysis. One additional 2 foot sample and three surface samples will be collected from this area. ANALYTICAL PARAMETERS: CN, O&G, and metals.

4. Three 4 foot borings will be completed in the drainage ditch downstream of sample D-1. Soil samples will be collected from the surface, at 2 feet and at 4 feet below the surface to analysis. ANALYTICAL PARAMETERS: O&G, Phenols, and Total Lead.

5. Two monitoring wells will be installed at the base of the slope of the parking lot area (area P). These wells will be constructed in the same manner as in Item 1. The estimated depth of these wells is 20 feet. Soil samples from the borings will be analyzed. ANALYTICAL PARAMETERS: BTX, O&G, Metals and CN.

   Ground water samples will be collected from these two wells for analysis. ANALYTICAL PARAMETERS: pH, specific conductance, TOC, TOX, O&G, Lead, CN, Metals and volatile organics (method 624).

6. Two wells will be completed in area I at a depth of 25 feet. Soil samples will be collected from 0-3' and 6'-8' of each of the borings for analysis. The locations of these wells will be selected in the field and will be near areas where surface debris is most prevalent. ANALYTICAL PARAMETERS: EP Tox Metals, volatile and semi-volatile organics (method 624 and 625).

   Ground water samples will be collected from these two wells for analyses. ANALYTICAL PARAMETERS: pH, specific conductance, TOC, TOX, O&G, EP Tox Metals, and volatile and semi-volatile organics (method 624 and 625).

7. Soil samples will be collected in areas E1 to E4 to a depth of two feet. Two additional samples will be collected outside of the concrete tanks identified during the initial investigation. These samples will be collected from 10 feet to below the ground surface using the drilling and sampling equipment. Re-sampling of the previous locations E1 to E4 will be performed to analyze for EP Tox lead due to high concentrations of total lead reported in the initial investigation. The ten (10) collected soil samples will be sent to the laboratory for analysis. ANALYTICAL PARAMETERS: EP Toxic Lead, O&G.

8. A shallow soil sample will be collected in Area F-1 to confirm high lead concentrations previously reported during the initial investigation. One shallow sample will be obtained from the drainage ditch near location F-1. ANALYTICAL PARAMETERS: EP TOX Lead.

9. Soil samples will be collected in areas H1-H3 to a depth of 10-feet. One boring will be completed at a location near H1 and one near locations H2 and H3. One sample from each boring will be collected from a depth of 6-9 feet. ANALYTICAL PARAMETERS: O&G, EP Toxic Metals, and volatile organics (method 624).

10. A third round of ground water samples will be collected from the existing five wells and the two monitoring wells near the wastewater treatment system buildings (Item 1).

# ATTACHMENT 2A

# CHAIN OF CUSTODY RECORDS

**LABORATORIES, INC.**

# CHAIN OF CUSTODY RECORD

SURVEY: Prestolite - Syracuse, N.Y.

SAMPLERS: (Signature) [illegible signature]

| STATION NUMBER | STATION LOCATION | DATE | TIME | SAMPLE TYPE Water Comp. | Grab | Air | SEQ. NO. | NO. OF CONTAINERS | ANALYSIS REQUIRED |
|---|---|---|---|---|---|---|---|---|---|
| MW 8 | 0-3' I | 5/22/87 | 1000 | | X | | 1 | 3 | ~~EP Tox metals~~, vol. & semi-vol. organics (624/625) |
| MW 8 | 6-8' I | | 1015 | | X | | 2 | 3 | |
| MW 9 | 0-3' I | | 1220 | | X | | 3 | 3 | |
| MW 9 | 6-8' I | | 1230 | | X | | 4 | 3 | |
| MW 10 | 2-4' (above till) P | | 1100 | | X | | 5 | 1 | BTX, O&G, metals, Cn EP Tox Total |
| MW 10 | 6-8' (below till) P | | 1115 | | X | | 6 | 1 | |
| MW 11 | 4-6' (above till) | | 1330 | | X | | 7 | 3 | |
| H1 | 6-9' | | 1435 | | X | | 8 | 3 | O&G, EP toxic metals, vol. organics (624) |
| H2/H3 | 5' | | 1500 | | X | | 9 | 3 | |
| E1 | 2' | | 1525 | | X | | 10 | 1 | EP toxic lead, O&G |
| E1 | 0-12' | | 1545 | X | | | 11 | 1 | |

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|
| [illegible signature] | | |
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by Mobile Laboratory for field analysis: (Signature) | Date/Time |

| Dispatched by: (Signature) | Date/Time | Received for Laboratory by: | Date/Time |
|---|---|---|---|
| | | W. [illegible] | 5/26/87 10:00 AM |

Method of Shipment:

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Road / Syracuse, New York 13221 / (315) 457-1494

1194.004.517

x509
* metals (Filtered)
Cd Cr Cu Fe Zn Ni Pb
** EPTOX metals (Filtered)

O'BRIEN & GERE

# CHAIN OF CUSTODY RECORD

SURVEY: Prestolite SYR N.Y.

SAMPLERS: (Signature) D. J. DeGirolamo

| STATION NUMBER | STATION LOCATION | DATE | TIME | SAMPLE TYPE: G. Water Comp. | Grab. | Air | SEQ. NO. | NO. OF CONTAINERS | ANALYSIS REQUIRED |
|---|---|---|---|---|---|---|---|---|---|
| MW 2 | | 6/4/87 | | | ✓ | | | 9 | O+G EPA 624 CN TOC TOX * metals Phenols |
| MW 1 | | 6/5/87 | | | | | | | |
| MW 3 | | 6/4/87 | | | | | | | |
| MW 4 | | 6/4/87 | | | | | | | |
| MW 5 | | 6/5/87 | | | | | | | |
| MW 6 | | | | | | | | | |
| MW 7 | | | | | | | | | |
| MW 8 | | | | | | | | | O+G EPA 624 CN TOC EPA 62[illegible] TOX ** EPTOX metals |
| MW 9 | | | | | | | | | |
| MW 10 | | | | | | | | 8 | TOC TOX CN O+G EPA 624 * metals |
| MW 11 | | | | | | | | 8 | |
| | | | | | | | | | |

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by Mobile Laboratory for field analysis: (Signature) | Date/Time |

| Dispatched by: (Signature) | Date/Time | Received for Laboratory by: | Date/Time |
|---|---|---|---|
| D. J. DeGirolamo | 6/8/87 11:21 | K. Riva | 6/8/87 11:20AM |

Method of Shipment:

O'Brien & Gere Engineers, Inc.
Box 4873 / 1304 Buckley Road / Syracuse, NY 13221 / (315) 451-4700

John Rinko - 1194,001,131

**LABORATORIES, INC.**

# CHAIN OF CUSTODY RECORD

| SURVEY | SAMPLERS: (Signature) |
|---|---|
| Prestolite - Syracuse | Donald T. Bresey |

| STATION NUMBER | STATION LOCATION | DATE | TIME | SAMPLE TYPE Water Comp. | Grab. | Air | SEQ. NO. | NO. OF CONTAINERS | ANALYSIS REQUIRED |
|---|---|---|---|---|---|---|---|---|---|
| MW-11 | 21-22' | 5/27/87 | 1145 | | X | | 1 | 3 | BTX, O&G, Total metals, CN (Digest) |
| D2 | 0' | | 1500 | | X | | 2 | 1 | O&G, phenols, total Pb (Digest) |
| D2 | 2' | | 1505 | | X | | 3 | 1 | |
| D2 | 4' | | 1510 | | X | | 4 | 1 | |
| F1 | Surface | | 1515 | | X | | 5 | 1 | EP Toxic Pb (Leach) |
| D3 | 0' | | 1520 | | X | | 6 | 1 | O&G, phenols, total Pb Diges |
| D3 | 2' | | 1525 | | X | | 7 | 1 | |
| D3 | 4' | | 1530 | | X | | 8 | 1 | |
| D4 | 0' | | 1540 | | X | | 9 | 1 | |
| D4 | 2' | | 1545 | | X | | 10 | 1 | |
| D4 | 4' | | 1550 | | X | | 11 | 1 | |

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|
| Donald T. Bresey | | |
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by Mobile Laboratory for field analysis: (Signature) | Date/Time |

| Dispatched by: (Signature) | Date/Time | Received for Laboratory by: | Date/Time |
|---|---|---|---|
| | | W. Smith | 5/28/87 8:30 AM |

Method of Shipment:

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Road / Syracuse, New York 13221 / (315) 457-1494
Oakdale Medical Building / 700 Harry L. Drive / Johnson City, New York 13790

1194,001,131

OBG LABORATORIES, INC.

## CHAIN OF CUSTODY RECORD

| SURVEY | SAMPLERS: (Signature) |
|---|---|
| Prestolite - Syracuse, N.Y. | Donald T. Bisseg |

| STATION NUMBER | STATION LOCATION | DATE | TIME | SAMPLE TYPE Water Comp. | Grab | Air | SEQ. NO. | NO. OF CONTAINERS | ANALYSIS REQUIRED |
|---|---|---|---|---|---|---|---|---|---|
| K1 | 2' | 5/26/87 | 0920 | | X | | 1 | 1 | Cn, O&G, metals, EP Tox Total Digest, Phenols |
| K1 | 4' | | 0930 | | X | | 2 | 1 | |
| E4 | 2' | | 0920 | | X | | 3 | 1 | EP Toxic Pb, O&G |
| E4 | 18'-20.5' | | 0935 | | X | | 4 | 1 | |
| K2 | 2' | | 0940 | | X | | 5 | 1 | Cn, O&G, metals, Total EP Tox Digest, Phenols |
| E3 | 2' | | 0955 | | X | | 6 | 1 | EP Toxic Pb, O&G |
| E5 | 10' | | 1015 | | X | | 7 | 1 | |
| E6 | 10' | | 1045 | | X | | 8 | 1 | |
| E3 | 10-20' | | 1045 | X | | | 9 | 1 | |
| E2 | 2' | | 1105 | | X | | 10 | 1 | |
| E2 | 14-16.5' | | 1135 | | X | | 11 | 1 | |
| K3 | SURFACE | | 1140 | | X | | 12 | 1 | Cn, O&G, metals, EP Tox Total Digest, Phenols |

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|
| Donald T. Bisseg | | |
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by Mobile Laboratory for field analysis: (Signature) | Date/Time |

| Dispatched by: (Signature) | Date/Time | Received for Laboratory by: | Date/Time |
|---|---|---|---|
| | | W. Smith | 5/26/87 13:45 |

Method of Shipment:

1194.001, 13

OBG
LABORATORIES, INC.

# CHAIN OF CUSTODY RECORD

SURVEY: Prestolite - Syracuse, N.Y.

SAMPLERS: (Signature) Donald T. Bazey

| STATION NUMBER | STATION LOCATION | DATE | TIME | SAMPLE TYPE Water Comp. | Grab. | Air | SEQ. NO. | NO. OF CONTAINERS | ANALYSIS REQUIRED |
|---|---|---|---|---|---|---|---|---|---|
| K4 | SURFACE | 5/26/87 | 1145 | | X | | 13 | 1 | Cn, O&G, metals EPTOX total - Digest Phenols |
| K5 | SURFACE | 5/26/87 | 1150 | | X | | 14 | 1 | " |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|
| Donald T. Bazey | | |
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| Relinquished by: (Signature) | Received by Mobile Laboratory for field analysis: (Signature) | Date/Time |

| Dispatched by: (Signature) | Date/Time | Received for Laboratory by: | Date/Time |
|---|---|---|---|
| | | W. Smith | 5/26/87 13:45 |

Method of Shipment:

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Road / Syracuse, New York 13221 / (315) 457-1494
Oakdale Medical Building / 700 Harry L. Drive / Johnson City, New York 13790

# ATTACHMENT 3A

# SOIL BORING LOGS

TEST BORINGS

PRESTOLITE - EASTWOOD

SYRACUSE, NEW YORK

parratt wolff inc
FISHER RD., EAST SYRACUSE, N.Y. 13057
TELEPHONE AREA CODE 315/437-1429

June 12, 1987

O'Brien and Gere Engineers
1304 Buckley Road
Syracuse, New York 13221

Attention: Mr. Guy Swenson

Re: 8739
Prestolite - Eastwood
Syracuse, New York

Gentlemen:

Enclosed are driller's field logs of eighteen soil test borings and four ground water monitoring wells made for you for the above project.

Soil samples from the borings were retained by your representative at the job site.

Drilling and well installations were done in accordance with his instructions and hole locations were established by him.

Thank you for this opportunity to work with you.

Very truly yours,

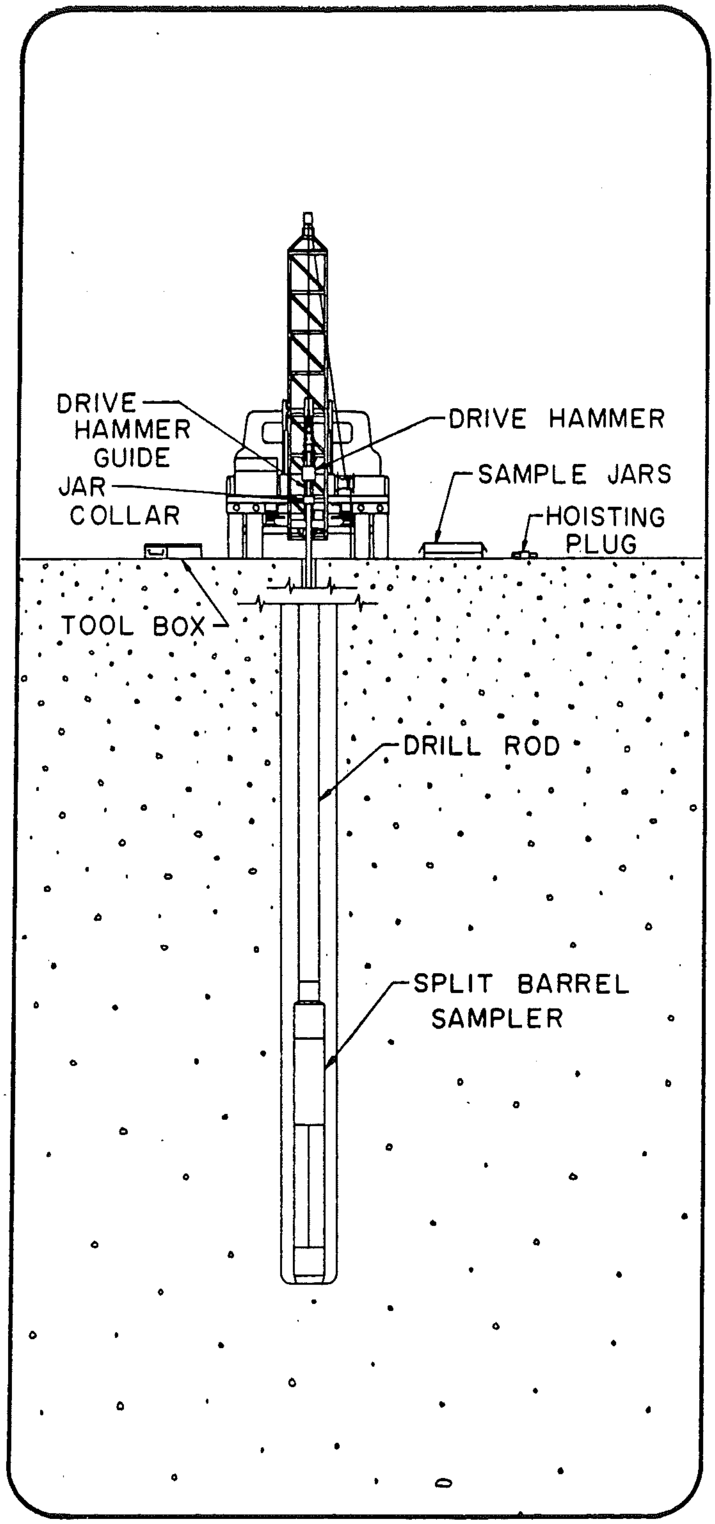
PARRATT - WOLFF, INC.

Steffen Wolff
President
SW/dp
encs:

parratt wolff inc

FISHER RD., EAST SYRACUSE, N.Y. 13057
TELEPHONE AREA CODE 315/437-1429

# SOIL SAMPLING METHODS




## Split barrel sampling

The following excerpts are from "Standard Method for penetration test and split-barrel sampling of soils."[1] (ASTM designation: D-1586-67 AASHO Designation: T-206-70.)

1. Scope

1.1 This method describes a procedure for using a split-barrel sampler to obtain respresentative samples of soil for identification purposes and other laboratory tests, and to obtain a measure of the resistance of the soil to penetration of the sampler.

2. Apparatus

2.1 Drilling Equipment – Any drilling equipment shall be acceptable that provides a reasonably clean hole before insertion of the sampler to ensure that the penetration test is performed on undisturbed soil, and that will permit the driving of the sampler to obtain the sample and penetration record in accordance with the procedure described in 3. Procedure. To avoid "whips" under the blows of the hammer, it is recommended that the drill rod have stiffness equal to or greater than the A-rod. An "A" rod is a hollow drill rod or "steel" having an outside diameter of 1-5/8 in. or 41.2 mm and an inside diameter of 1-1/8 in. or 28.5 mm, through which the rotary motion of drilling is transferred from the drilling motor to the cutting bit. A stiffer drill rod is suggested for holes deeper than 50 ft (15m). The hole shall be limited in diameter to between 2-1/4 and 6 in. (57.2 and 152mm).

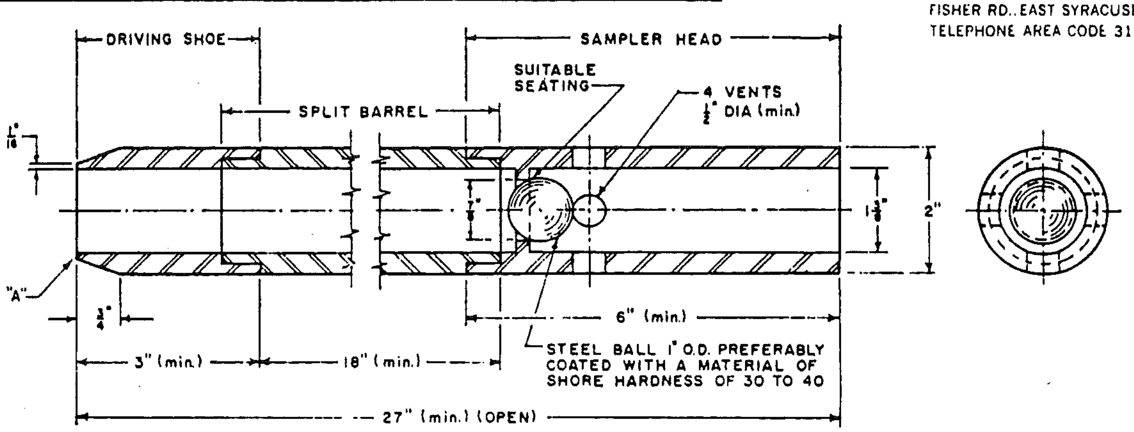
2.2 Split-Barrel Sampler – The sampler shall be constructed with the dimensions indicated (in Fig. 1.) The drive shoe shall be of hardened steel and shall be replaced or repaired when it becomes dented or distorted. The coupling head shall have four 1/2-in. (12.7-mm) (minimum diameter) vent ports and shall contain a ball check valve. If sizes other than the 2-in. (50.8-mm) sampler are permitted, the size shall be conspicuously noted on all penetration records.

2.3 Drive Weight Assembly – The assembly shall consist of a 140-lb (63.5-kg) weight, a driving head, and a guide permitting a free fall of 30 in. (0.76 m). Special precautions shall be taken to ensure that the energy of the falling weight is not reduced by friction between the drive weight and the guides.

2.4 Accessory Equipment – Labels, data sheets, sample jars, paraffin, and other necessary supplies should accompany the sampling equipment.

# SOIL SAMPLING METHODS

parratt wolff inc
FISHER RD., EAST SYRACUSE, N Y 13057
TELEPHONE AREA CODE 315/437-1429




Note 1 – Split barrel may be 1-1/2 in. inside diameter provided it contains a liner of 16-gage wall thickness.

Note 2 – Core retainers in the driving shoe to prevent loss of sample are permitted.

Note 3 – The corners at A may be slightly rounded.

**Table of Metric Equivalents.**

| In. | Mm | Cm | In. | Mm | Cm |
|---|---|---|---|---|---|
| 1/16 (16 gage) | 1.5 | . . . | 2 | . . . | 5.08 |
| 1/2 | 12.7 | . . . | 3 | . . . | 7.62 |
| 3/4 | 19.0 | 1.90 | 6 | . . . | 15.24 |
| 7/8 | 22.2 | 2.22 | 18 | . . . | 45.72 |
| 1-3/8 | 34.9 | 3.49 | 27 | 68.58 | |
| 1-1/2 | 38.1 | 3.81 | | | |

Fig. 1 – Standard Split Barrel Sampler Assembly

3. Procedure

3.1 Clear out the hole to sampling elevation using equipment that will ensure that the material to be sampled is not disturbed by the operation. In saturated sands and silts withdraw the drill bit slowly to prevent loosening of the soil around the hole. Maintain the water level in the hole at or above ground water level.

3.2 In no case shall a bottom-discharge bit be permitted. (Side-discharge bits are permissible.) The process of jetting through an open-tube sampler and then sampling when the desired depth is reached shall not be permitted. Where casing is used, it may not be driven below sampling elevation. Record any loss of circulation or excess pressure in drilling fluid during advancing of holes.

3.3 With the sampler resting on the bottom of the hole, drive the sampler with blows from the 140-lb (63.5 kg) hammer falling 30 in. (0.76 m) until either 18 in. (0.45 m) have been penetrated or 100 blows have been applied.

3.4 Repeat this operation at intervals not longer than 5 ft (1.5 m) in homogeneous strata and at every change of strata.

3.5 Record the number of blows required to effect each 6 in. (0.15 m) of penetration or fractions thereof. The first 6 in. (0.15 m) is considered to be a seating drive. The number of blows required for the second and third 6 in. (0.15 m) of penetration added is termed the penetration resistance, N. If the sampler is driven less than 18 in. (0.45 m), the penetration resistance is that for the last 1 ft (0.30 m) of penetration (if less than 1 ft (0.30 m) is penetrated, the logs shall state the number of blows and the fraction of 1 ft (0.30 m) penetrated).

3.6 Bring the sampler to the surface and open. Describe carefully typical samples of soils recovered as to composition, structure, consistency, color, and condition; then put into jars without ramming. Seal them with wax or hermetically seal to prevent evaporation of the soil moisture. Affix labels to the jar or make notations on the covers (or both) bearing job designation, boring number, sample number, depth penetration record, and length of recovery. Protect samples against extreme temperature changes.

4. Report

4.1 Data obtained in borings shall be recorded in the field and shall include the following:

4.1.1 Name and location of job,

4.1.2 Date of boring – start, finish,

4.1.3 Boring number and coordinate, if available,

4.1.4 Surface elevation, if available,

4.1.5 Sample number and depth,

4.1.6 Method of advancing sampler, penetration and recovery lengths,

4.1.7 Type and size of sampler,

4.1.8 Description of soil,

4.1.9 Thickness of layer,

4.1.10 Depth to water surface; to loss of water; to artesian head; time at which reading was made,

4.1.11 Type and make of machine,

4.1.12 Size of casing, depth of cased hole,

4.1.13 Number of blows per 6 in. (0.15 m)

4.1.14 Names of crewmen, and

4.1.15 Weather, remarks.

---

[1]Under the standardization procedure of the Society, this method is under the jurisdiction of the ASTM Committee D-18 on Soil and Rock for Engineering Purposes. A list of members may be found in the ASTM Year Book.

Current edition accepted October 20, 1967. Originally issued, 1958. Replaces D-1586-64T.

parratt wolff inc
FISHER RD., EAST SYRACUSE, N.Y. 13057
TELEPHONE AREA CODE 315/437-1429

# GENERAL NOTES

1. Soil boring logs, notes and other data shown are the results of personal observations and interpretations made by Parratt-Wolff, Inc.

Exploration records prepared by our drilling foreman in the field form the basis of all logs, and samples of subsurface materials retained by the driller are observed by technical personnel in our laboratory to check field classifications.

2. Explanation of the classifications and terms:

a. Bedrock — Natural solid mineral matter occurring in great thickness and extent in its natural location. It is classified according to geological type and structure (joints, bedding, etc.) and described as solid, weathered, broken or fragmented depending on its condition.

b. Soils — Sediments or other unconsolidated accumulations of particles produced by the physical and chemical disintegration of rocks and which may or may not contain organic matter.

**PENETRATION RESISTANCE**

| *COHESIONLESS SOILS* | | *COHESIVE SOILS* | |
|---|---|---|---|
| Blows Per Ft. | Relative Density | Blows Per Ft. | Consistency |
| 0 to 4 | Very Loose | 0 to 2 | Very Soft |
| 4 to 10 | Loose | 2 to 4 | Soft |
| 10 to 30 | Medium Dense | 4 to 8 | Medium Stiff |
| 30 to 50 | Dense | 8 to 15 | Stiff |
| Over 50 | Very Dense | 10 to 30 | Very Stiff |
| | | Over 30 | Hard |

*Size Component Terms*

| | | |
|---|---|---|
| Boulder | Larger than 8 inches | |
| Cobble | 8 inches to 3 inches | |
| Gravel — coarse | 3 inches to 1 inch | |
| — medium | 1 inch to 3/8 inch | |
| — fine | 3/8 inch to 4.76 mm | |
| Sand — coarse | 4.76 mm to 2.00 mm | (#10 sieve) |
| — medium | 2.00 mm to 0.42 mm | (#40 sieve) |
| — fine | 0.42 mm to 0.074 mm | (#200 sieve) |
| Silt and Clay | Finer than 0.074 mm | |

*Proportion By Weight*

Major component is shown with all letters capitalized.

Minor component percentage terms of total sample are:

| | |
|---|---|
| and | 35 to 50 percent |
| some | 20 to 35 percent |
| little | 10 to 20 percent |
| trace | 1 to 10 percent |

c. Gradation Terms — The terms coarse, medium and fine are used to describe gradation of Sand and Gravel.

d. The terms used to describe the various soil components and proportions are arrived at by visual estimates of the recovered soil samples. Other terms are used when the recovered samples are not truly representative of the natural materials, such as soil containing numerous cobbles and boulders which cannot be sampled, thinly stratified soils, organic soils, and fills.

e. Ground water — The measurement was made during exploration work or immediately after completion, unless otherwise noted. The depth recorded is influenced by exploration methods, soil type and weather conditions during exploration. Where no water was observed it is so indicated. It is anticipated that the ground water will rise during periods of wet weather. In addition, perched ground water above the water levels indicated (or above the bottom of the hole where no ground water is indicated) may be encountered at changes in soil strata or top of rock.

parratt wolff inc
FISHER RD., EAST SYRACUSE, N.Y. 13057
TELEPHONE AREA CODE 315/437-1429

# A BRIEF DESCRIPTION OF THE UNIFIED SOIL SYSTEM

The Unified Classification System is an engineering soil classification that is an outgrowth of the Air-Field classification developed by Casagrande.

The system incorporates the textural characteristics of a soil into the engineering classification. All soils are classified into fifteen groups, each group being designated by two letters. These letters are as follows: G—gravel, S—sand, M—Non plastic or low plasticity fines, C—plastic fines, Pt—peat, humus and swamp soils, O—organic, W—well graded, P—poorly graded, L—low liquid limit, H—high liquid limit.

### GW and SW Groups

These groups comprise well graded gravelly and sandy soils which contain less than 5% of non plastic fines passing a #200 sieve. Fines which are present must not noticeably change the strength characteristics of the coarse grain fraction and must not interfere with its free draining characteristics. In areas subject to frost action the material should not contain more than about 3% of soil grains smaller than .02 millimeters in size.

### GP and SP Groups

These groups are poorly graded gravels and sands containing less than 5% non plastic fines. They may consist of uniform gravels, uniform sands, or non uniform mixtures of very coarse material and very fine sand with intermediate sizes lacking. Materials of this latter type are sometimes referred to as skip graded, cap graded, or step graded.

### GM and SM Groups

In general, these groups include gravels or sands which contain more than 12% of fines having little or no plasticity. The plasticity index and liquid limit of a soil in either of these groups plot below the "A" line on a plasticity chart. Gradation is not important and both low grade and poorly graded materials are included. Some sands and gravels in these groups may have a binder composed of natural cementing agents so proportioned that the mixture shows negligible swelling or shrinkage. Thus, the dry strength is provided by a small amount of soil binder or dry cementation of calcareous materials or iron oxide. A fine fraction of non cemented materials may be composed of silts or rock flour types having little or no plasticity, and the mixture will exhibit no dry strength.

### GC and SC Groups

These groups comprise gravelly or sandy soils with more than 12% of fines which exhibit either low or high plasticity. The plasticity index and liquid limit of a soil in either of these groups plot above the "A" line on the plasticity chart. Gradation of these materials is not important. Plasticity of the binder fraction has more influence on the behavior of the soils than does the variation in gradation. A fine fraction is generally composed of clays.

### ML and MH Groups

These groups include predominantly silty materials and micaceous or diatomaceous soils. An arbitrary division between the two groups has been established with a liquid limit of 50. Soils in these groups are sandy silts, clayey silts or organic silts with relatively low plasticity. Also included are loessial soils and rock flours. Micaceous and diatomaceous soils generally fall within the MH group, but may extend into the ML group when their liquid limit is less than 50. The same is true for certain types of kaolin clays and some illite clays having relatively low plasticity.

### CL and CH Groups

The CL and CH groups embrace clays with low and high liquid limits respectively. They are primarily inorganic clays. Low plasticity clays are classified as CL and are usually lean clays, sandy clays, and silty clays. The medium plasticity and high plasticity clays are classified as CH. These include fat clays, gumbo clays, certain volcanic clays and bentonite.

### OL and OH Groups

The soils in these groups are characterized by the presence of organic matter including organic silts and clays. They have a plasticity range that corresponds with the ML and MH groups.

### Pt Group

Highly organic soils which are very compressible have undesirable construction characteristics and are classified in one group with the symbol Pt. Peat, humus and swamp soils with a highly organic texture are typical of the group. Particles of leaves, grass, branches of bushes and other fibrous vegetable matter are common components of these soils.

### Borderline Classification

Soils in the GW, SW, GP and SP groups are non plastic materials having less than 5% passing the #200 sieve, while GM, SM, GC, and SC soils have more than 12% passing the #200 sieve. When these coarse grain materials contain between 5% and 12% of fines they are classified as borderline, and are designated by the dual symbol such as GW-GM. Similarly coarse grain soils which have less than 5% passing the #200 sieve, but which are not free draining or in which the fine fraction exhibits plasticity are also classed as borderline and are given a dual symbol. Still another type of borderline classification occurs when a liquid limit of a fine grain soil is less than 29 and the plasticity index lies in the range of four to seven. These limits are indicated by the shaded area on the plasticity chart.

### Silty and Clayey

In the Unified System, these terms are used to describe soils whose Atterberg limits plot below and above the "A" line on the plasticity chart. The adjectives silty and clayey are used to describe soils whose limits plot close to the "A" line.

# SOIL CLASSIFICATION SYSTEM

| MAJOR DIVISIONS | | | GROUP SYMBOLS | TYPICAL NAMES |
|---|---|---|---|---|
| COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size) | GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size) | CLEAN GRAVELS (Little or no fines) | GW | Well graded gravels, gravel - sand mixtures, little or no fines. |
| | | | GP | Poorly graded gravels or gravel - sand mixtures, little or no fines. |
| | | GRAVELS WITH FINES (Appreciable amt. of fines) | GM | Silty gravels, gravel - sand - silt mixtures. |
| | | | GC | Clayey gravels, gravel - sand - clay mixtures. |
| | SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size) | CLEAN SANDS (Little or no fines) | SW | Well graded sands, gravelly sands, little or no fines. |
| | | | SP | Poorly graded sands or gravelly sands, little or no fines. |
| | | SANDS WITH FINES (Appreciable amt. of fines) | SM | Silty sands, sand-silt mixtures. |
| | | | SC | Clayey sands, sand-clay mixtures. |
| FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size) | SILTS AND CLAYS (Liquid limit LESS than 50) | | ML | Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity. |
| | | | CL | Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays. |
| | | | OL | Organic silts and organic silty clays of low plasticity. |
| | SILTS AND CLAYS (Liquid limit GREATER than 50) | | MH | Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts. |
| | | | CH | Inorganic clays of high plasticity, fat clays. |
| | | | OH | Organic clays of medium to high plasticity, organic silts. |
| HIGHLY ORGANIC SOILS | | | Pt | Peat and other highly organic soils. |

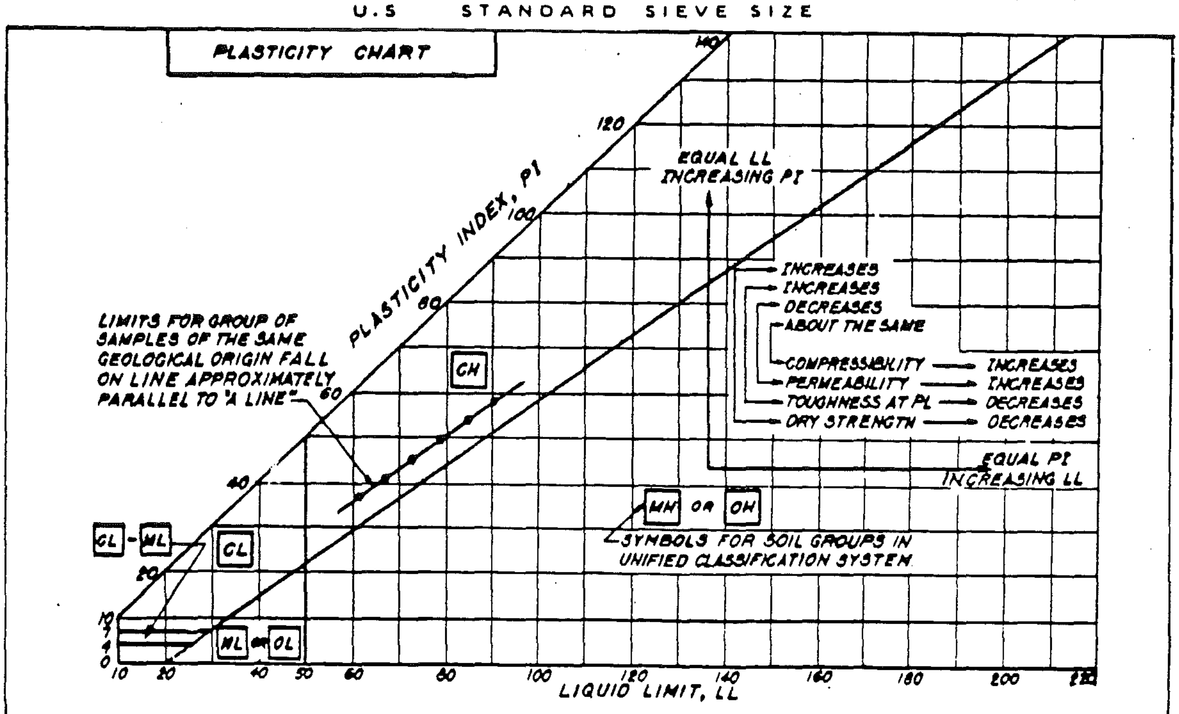
BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

## PARTICLE SIZE LIMITS

| SILT OR CLAY | SAND | | | GRAVEL | | COBBLES | BOULDERS |
|---|---|---|---|---|---|---|---|
| | FINE | MEDIUM | COARSE | FINE | COARSE | | |

No. 200 No. 40 No. 10 No. 4 ¾ in. 3 in. (12 in.)

U.S STANDARD SIEVE SIZE



parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/27/87 DATE COMPLETED 5/27/87

HOLE NO. D-2-87-431
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 4/4 | | Brown moist stiff SILT, little fine | |
| | 2.0' | | | 5/5 | 9 | gravel, trace brick | |
| | 2.0'- | 2 | | 4/2 | | | |
| | 4.0' | | | 3/4 | 5 | | |
| 5.0 | | | | | | Bottom of Boring | 4.0' |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/27/87 DATE COMPLETED 5/27/87

HOLE NO. D-3-87-432
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER SHEET 1 OF 1

DRILLER'S FIELD LOG File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 3/5 | | Brown moist stiff SILT, little fine | |
| | 2.0' | | | 6/8 | 11 | gravel | 2.0' |
| | 2.0'- | 2 | | 19/27 | | Brown moist hard SILT, some fine gravel | |
| | 4.0' | | | 36/39 | 63 | | |
| 5.0 | | | | | | Bottom of Boring | 4.0' |

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# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/27/87 DATE COMPLETED 5/27/87

HOLE NO. D-4-87-433
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 1/2 | | Black moist stiff SILT, little fine to | |
| | 2.0' | | | 3/6 | 5 | medium gravel | 2.0' |
| | 2.0'- | 2 | | 5/9 | | Brown-red very stiff SILT, little fine | |
| | 4.0' | | | 19/21 | 28 | gravel | |
| 5.0 | | | | | | Bottom of Boring | 4.0' |

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# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/22/87 DATE COMPLETED 5/22/87

HOLE NO. MW-8-87-434
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Installed Well

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 7/9 | | Brown moist medium dense fine to coarse SAND and fine to coarse GRAVEL, FILL | |
| | 2.0' | | | 9/5 | 18 | | |
| | 2.0'- | 2 | | 5/6 | | | |
| | 4.0' | | | 13/12 | 19 | | |
| 5.0 | 4.0'- | 3 | | 9/10 | | | |
| | 6.0' | | | 10/11 | 20 | | 6.0' |
| | 6.0'- | 4 | | 13/13 | | Brown moist very stiff SILT, fine to coarse SAND and fine to coarse GRAVEL | |
| | 8.0' | | | 16/15 | 29 | | |
| | | | | | | | |
| 10.0 | | | | | | | 10.0' |
| | 10.0'- | 5 | | 19/27 | | Green dry hard silty weathered SHALE | |
| | 12.0' | | | 38/51 | 65 | | |
| | | | | | | | |
| | | | | | | | |
| 15.0 | | | | | | | |
| | 15.0'- | 6 | | 50-.2' | | | |
| | 15.2' | | | | | | |
| | | | | | | | |
| | 18.0'- | 7 | | 50-.3' | | | |
| 20.0 | 18.3' | | | | | | |
| | | | | | | Bottom of Boring | 18.3' |
| | | | | | | Note: Installed 2" PVC screen 18.0' to 8.0', 2" PVC riser to surface with locking cover. | |

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# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
HOLE NO. MW-9-87-435
SURF. EL.
DATE STARTED 5/22/87 DATE COMPLETED 5/22/87
JOB NO. 8739
GROUND WATER DEPTH WHILE DRILLING 4.0'
BEFORE CASING REMOVED
AFTER CASING REMOVED Installed Well

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER
SHEET 1 OF 1

DRILLER'S FIELD LOG
File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 7/6 | | Brown moist medium dense to very dense CINDERS, fine to coarse SAND and fine to coarse GRAVEL, FILL | |
| | 2.0' | | | 5/8 | 11 | | |
| | 2.0'- | 2 | | 31/50 | | | |
| ▼ WL | 2.9' | | | .4' | | | 4.0' |
| 5.0 | 4.0'- | 3 | | 7/7 | | Brown wet medium dense fine to coarse SAND and fine to coarse GRAVEL | |
| | 6.0' | | | 8/8 | 15 | | |
| | 6.0'- | 4 | | 8/6 | | | |
| | 8.0' | | | 14/19 | 20 | | |
| | | | | | | | 9.0' |
| 10.0 | | | | | | Green dry hard silty weathered SHALE | |
| | 10.0'- | 5 | | 17/34 | | | |
| | 11.5' | | | 42 | 76 | Auger Refusal | 12.0' |
| | | | | | | Bottom of Boring | 12.0' |
| 15.0 | | | | | | | |
| | | | | | | Note: Installed 2" PVC screen 12.0' to 2.0', 2" PVC riser to surface with locking cover. | |

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# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT: Prestolite - Eastwood
LOCATION: Syracuse, New York
DATE STARTED: 5/22/87 DATE COMPLETED: 5/22/87

HOLE NO. MW-10-87-436
SURF. EL.
JOB NO. 8739
GROUND WATER DEPTH
WHILE DRILLING 10.0'
BEFORE CASING REMOVED 18.0'
AFTER CASING REMOVED Installed Well

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 2/3 | | Brown moist loose dense fine SAND and | |
| | 2.0' | | | 5/7 | 8 | SILT | 2.0' |
| | 2.0'- | 2 | | 10/8 | | Tan moist medium dense fine SAND, little | |
| | 4.0' | | | 9/12 | 17 | silt | 4.0' |
| 5.0 | 4.0'- | 3 | | 5/8 | | Brown moist medium dense fine to coarse | |
| | 6.0' | | | 7/9 | 15 | SAND, some fine to medium gravel, little | |
| | 6.0'- | 4 | | 10/15 | | silt | |
| | 8.0' | | | 30/19 | 45 | | 7.5' |
| | | | | | | Gray dry hard silty weathered SHALE | |
| ▼ 10.0 WL | | | | | | | |
| 15.0 | 14.0'- | 5 | | 15/27 | | | |
| | 16.0' | | | 38/41 | 65 | | |
| | | | | | | Bottom of Boring | 16.0' |
| 20.0 | | | | | | | |
| | | | | | | Note: Installed 2" PVC screen 13.8' to 3.8', 2" PVC riser to surface with locking cover. | |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT: Prestolite - Eastwood
LOCATION: Syracuse, New York
DATE STARTED: 5/22/87  DATE COMPLETED: 5/27/87

HOLE NO. MW-11-87-437
SURF. EL.
JOB NO. 8739
GROUND WATER DEPTH WHILE DRILLING 18.0'
BEFORE CASING REMOVED
AFTER CASING REMOVED Installed Well

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE: HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 2/2 | | Brown moist loose fine SAND and SILT | |
| | 2.0' | | | 3/3 | 5 | | 2.0' |
| | 2.0'- | 2 | | 10/3 | | Brown moist stiff SILT, little fine SAND | |
| | 4.0' | | | 7/13 | 10 | | |
| 5.0 | 4.0'- | 3 | | 7/9 | | | 5.0' |
| | 6.0' | | | 9/14 | 18 | Red-brown moist very stiff SILT, little fine to coarse sand | |
| | 6.0'- | 4 | | 11/21 | | | |
| | 8.0' | | | 25/32 | 46 | | 8.0' |
| | 8.0'- | 5 | | 24/46 | | Red-brown dry hard SILT, little fine to coarse sand, trace fine gravel | |
| 10.0 | 9.6' | | | 54-.4' | | | |
| | 10.0'- | 6 | | 28/63 | | | |
| | 11.25' | | | 37-.25' | | | |
| | | | | | | | |
| | | | | | | | |
| 15.0 | | | | | | | |
| | 15.0'- | 7 | | 24/35 | | | |
| | 17.0' | | | 37/39 | 72 | | |
| ▼ WL | 17.0'- | 8 | | 18/23 | | | |
| | 19.0' | | | 30/30 | 53 | | |
| 20.0 | 19.0'- | 9 | | 13/16 | | | |
| | 20.0' | | | | | | 21.0' |
| | 20.0'- | 10 | | 14/20 | | Green moist hard silty weathered SHALE | |
| | 22.0' | | | 50/30 | 70 | | |
| | | | | | | Bottom of Boring | 22.0' |
| 25.0 | | | | | | | |
| | | | | | | Note: Installed 2" PVC screen 22.0' to 12.0', 2" PVC riser to surface with locking cover. | |

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# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT: Prestolite - Eastwood
LOCATION: Syracuse, New York
DATE STARTED: 5/22/87 DATE COMPLETED: 5/22/87

HOLE NO. H-1-87-438
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING: Dry
BEFORE CASING REMOVED: Dry
AFTER CASING REMOVED: Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE: HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | | | | | | Brown moist SILT | |
| 5.0 | | | | | | | |
| | 7.0'-<br>9.0' | 1 | | Auger<br>Sample | | | |
| 10.0 | | | | | | Bottom of Boring | 9.0' |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT: Prestolite - Eastwood
LOCATION: Syracuse, New York
DATE STARTED: 5/22/87 DATE COMPLETED: 5/22/87

HOLE NO. H-2-87-439
SURF. EL.
JOB NO. 8739
GROUND WATER DEPTH
WHILE DRILLING: Dry
BEFORE CASING REMOVED: Dry
AFTER CASING REMOVED: Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE: HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | | | | | | Brown moist SILT | |
| 5.0 | 5.0'- | 1 | | Auger | | Auger Refusal | 5.0' |
| | | | | Sample | | Bottom of Boring | 5.0' |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/22/87 DATE COMPLETED 5/22/87

HOLE NO. H-3-87-440
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER



DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | | | | | | Brown moist SILT | |
| 5.0 | 5.0'- | 1 | | Auger | | Auger Refusal | 5.0' |
| | | | | Sample | | Bottom of Boring | 5.0' |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT: Prestolite - Eastwood
LOCATION: Syracuse, New York
HOLE NO. E-1-87-441
SURF. EL.
DATE STARTED 5/22/87 DATE COMPLETED 5/22/87
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 16/11 | | Brown moist very loose to dense CINDERS | |
| | 2.0' | | | 6/7 | 17 | | |
| | 2.0' | 2 | | 9/5 | | | |
| | 4.0' | | | 3/2 | 8 | | |
| 5.0 | 4.0'- | 3 | | 2/1 | | | |
| | 6.0' | | | 1/1 | 2 | | |
| | 6.0'- | 4 | | 1/1 | | | |
| | 8.0' | | | 1/1 | 2 | | |
| | 8.0'- | 5 | | 4/5 | | | |
| 10.0 | 10.0' | | | 18/20 | 23 | | |
| | 10.0'- | 6 | | 10/11 | | | |
| | 12.0' | | | 15/23 | 26 | | |
| | | | | | | Bottom of Boring | 12.0' |
| 15.0 | | | | | | | |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/26/87 DATE COMPLETED 5/26/87

HOLE NO. E-2-87-442
SURF. EL.
JOB NO. 8739
GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 7/9 | | Brown moist medium dense CINDERS, fine to coarse SAND, fine GRAVEL and SILT | |
| | 2.0' | | | 14/22 | 23 | | |
| 5.0 | | | | | | | |
| | | | | | | | 9.8' |
| 10.0 | | | | | | Red-brown moist hard SILT, some fin to coarse sand, some fine gravel | |
| 15.0 | 14.0'- | 2 | | 32/42 | | | |
| | 16.0' | | | 32/25 | 74 | | |
| | | | | | | Bottom of Boring | 16.0' |
| 20.0 | | | | | | | |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/26/87 DATE COMPLETED 5/26/87

HOLE NO. E-3-87-443
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING 9.0'
BEFORE CASING REMOVED 9.0'
AFTER CASING REMOVED 9.0'

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 10/13 | | Brown moist dense fine to coarse SAND and fine to medium GRAVEL, little silt | |
| | 2.0' | | | 18/23 | 31 | | |
| 5.0 | | | | | | | |
| WL | | | | | | | |
| 10.0 | | | | | | | 10.0' |
| | 10.0'- | 2 | | 4/1 | | Brown-red wet very loose to very dense CINDERS and RUBBLE FILL | |
| | 12.0' | | | 2/1 | 3 | | |
| | 12.0'- | 3 | | 1/1 | | | |
| | 14.0' | | | 1/3 | 2 | | |
| 15.0 | 14.0'- | 4 | NO | 4/1 | | | |
| | 16.0' | | REC | 2/2 | 3 | | |
| | 16.0'- | 5 | | 5/46 | | | |
| | 17.2' | | | 50-.2' | | | |
| | 18.0'- | 6 | | 20/10 | | | |
| 20.0 | 20.0' | | | 5/9 | 15 | | |
| | | | | | | Bottom of Boring | 20.0' |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/26/87 DATE COMPLETED 5/26/87

HOLE NO. E-4-87-444
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING 12.0'
BEFORE CASING REMOVED 12.0'
AFTER CASING REMOVED 12.0'

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 8/7 | | Brown-gray moist medium dense to very dense CINDERS, fine to medium GRAVEL, and fine to coarse SAND | |
| | 2.0' | | | 8/15 | 15 | | |
| 5.0 | | | | | | | |
| 10.0 | | | | | | | |
| ▼ WL | | | | | | | |
| 15.0 | | | | | | | |
| | 18.0'- | 2 | | 15/36 | | | |
| 20.0 | 19.2' | | | 50-.2' | | Bottom of Boring | 19.2' |

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# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/26/87 DATE COMPLETED 5/26/87

HOLE NO. E-5-87-445
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | | | | | | Brown moist hard SILT | |
| 5.0 | | | | | | | |
| 10.0 | 9.5'- | 1 | | 9/15 | | | |
| | 11.0' | | | 18 | 33 | | |
| | | | | | | Bottom of Boring | 11.0' |
| 15.0 | | | | | | | |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/26/87 DATE COMPLETED 5/26/87

HOLE NO. E-6-87-446
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING
BEFORE CASING REMOVED
AFTER CASING REMOVED

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | | | | | | Brown moist very stiff SILT and fine to coarse GRAVEL | |
| 5.0 | | | | | | | |
| 10.0 | 9.5'- | 1 | | 10/10 | | | |
| | 11.0' | | | 14 | 24 | | |
| | | | | | | Bottom of Boring | 11.0' |
| 15.0 | | | | | | | |

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# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT: Prestolite - Eastwood
LOCATION: Syracuse, New York
DATE STARTED: 5/26/87 DATE COMPLETED: 5/26/87

HOLE NO. K-1-87-447
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | | | | | | Brown moist stiff SILT and fine to coarse SAND, trace clay | |
| | 3.0'- | 1 | | 2/3 | | | |
| | 4.5' | | | 6 | 9 | | |
| 5.0 | | | | | | Bottom of Boring | 4.5' |

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# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite - Eastwood
LOCATION Syracuse, New York
DATE STARTED 5/26/87 DATE COMPLETED 5/26/87

HOLE NO. K-2-87-448
SURF. EL.
JOB NO. 8739

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE HOLLOW STEM AUGER

SHEET 1 OF 1

DRILLER'S FIELD LOG

File #1194.001.131

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 1.5'- | 1 | | 10 | | Brown moist dense fine to coarse SAND and fine to medium GRAVEL, some silt, trace clay | |
| | 3.0' | | | 18/23 | 41 | | |
| | | | | | | Bottom of Boring | 3.0' |
| 5.0 | | | | | | | |

TEST BORINGS AND

GROUND WATER OBSERVATION WELL INSTALLATIONS

PRESTOLITE SITE INVESTIGATION

SYRACUSE, NEW YORK

parratt wolff inc
FISHER RD., EAST SYRACUSE, N.Y. 13057
TELEPHONE AREA CODE 315/437-1429

December 12, 1986

O'Brien and Gere Engineers, Inc.
1304 Buckley Road
Syracuse, New York 13221

Attention: Mrs. Deborah Wright

Re: 85186
Prestolite Site Investigation
Syracuse, New York
File #1194.004.130

Gentlemen:

Enclosed are the logs of two test borings made for you for the above project.

Soil samples from these borings have been delivered to your office this date under separate cover.

The borings were made at points located by you and were drilled in accordance with your instructions.

Thank you for this opportunity to work with you.

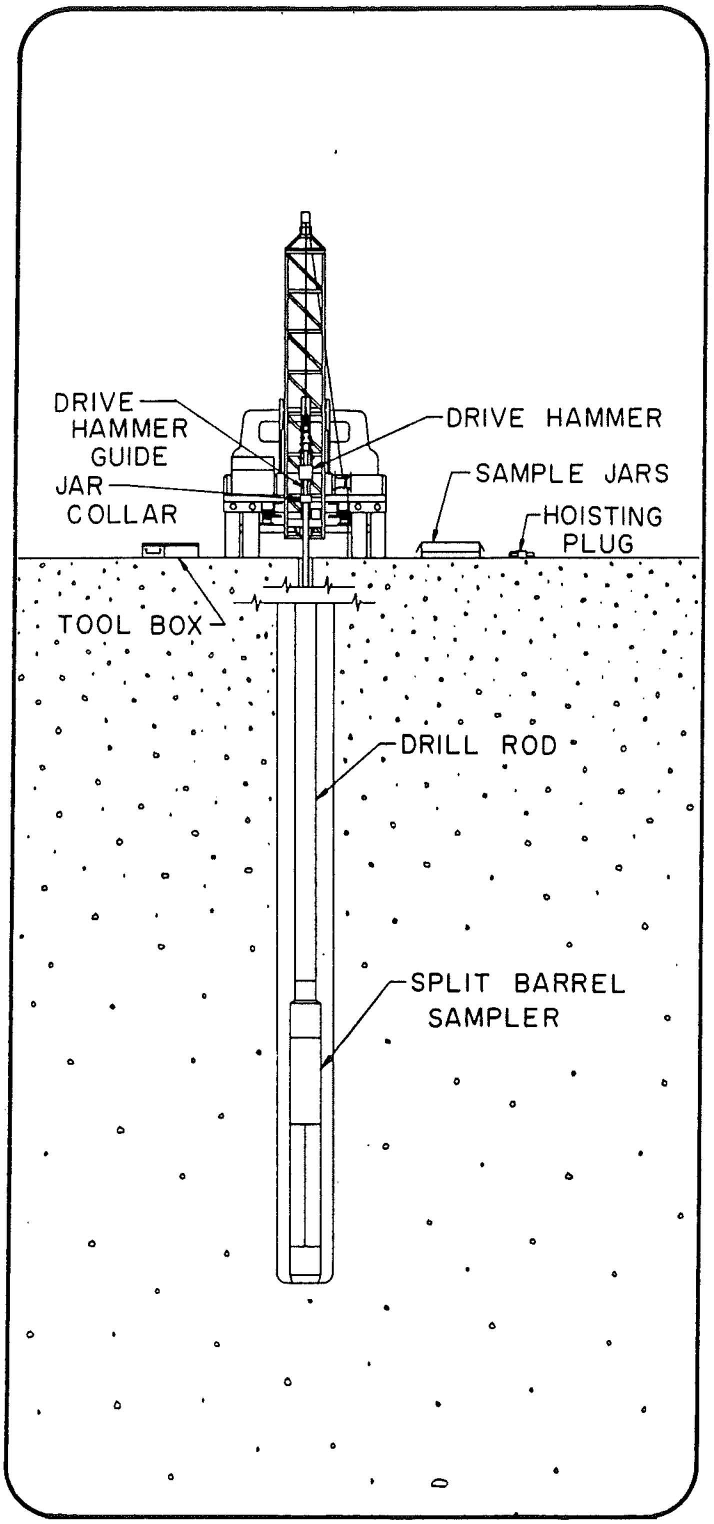
Very truly yours,

PARRATT - WOLFF, INC.

Steffen Wolff
SW/lc
encs:

parratt wolff inc
FISHER RD., EAST SYRACUSE, N.Y. 13057
TELEPHONE AREA CODE 315/437-1429






# Split barrel sampling

The following excerpts are from "Standard Method for penetration test and split-barrel sampling of soils."[1] (ASTM designation: D-1586-67 AASHO Designation: T-206-70.)

1. Scope

1.1 This method describes a procedure for using a split-barrel sampler to obtain representative samples of soil for identification purposes and other laboratory tests, and to obtain a measure of the resistance of the soil to penetration of the sampler.

2. Apparatus

2.1 Drilling Equipment – Any drilling equipment shall be acceptable that provides a reasonably clean hole before insertion of the sampler to ensure that the penetration test is performed on undisturbed soil, and that will permit the driving of the sampler to obtain the sample and penetration record in accordance with the procedure described in 3. Procedure. To avoid "whips" under the blows of the hammer, it is recommended that the drill rod have stiffness equal to or greater than the A-rod. An "A" rod is a hollow drill rod or "steel" having an outside diameter of 1-5/8 in. or 41.2 mm and an inside diameter of 1-1/8 in. or 28.5 mm, through which the rotary motion of drilling is transferred from the drilling motor to the cutting bit. A stiffer drill rod is suggested for holes deeper than 50 ft (15m). The hole shall be limited in diameter to between 2-1/4 and 6 in. (57.2 and 152mm).

2.2 Split-Barrel Sampler – The sampler shall be constructed with the dimensions indicated (in Fig. 1.) The drive shoe shall be of hardened steel and shall be replaced or repaired when it becomes dented or distorted. The coupling head shall have four 1/2-in. (12.7-mm) (minimum diameter) vent ports and shall contain a ball check valve. If sizes other than the 2-in. (50.8-mm) sampler are permitted, the size shall be conspicuously noted on all penetration records.

2.3 Drive Weight Assembly – The assembly shall consist of a 140-lb (63.5-kg) weight, a driving head, and a guide permitting a free fall of 30 in. (0.76 m). Special precautions shall be taken to ensure that the energy of the falling weight is not reduced by friction between the drive weight and the guides.

2.4 Accessory Equipment – Labels, data sheets, sample jars, paraffin, and other necessary supplies should accompany the sampling equipment.

# SOIL SAMPLING METHODS

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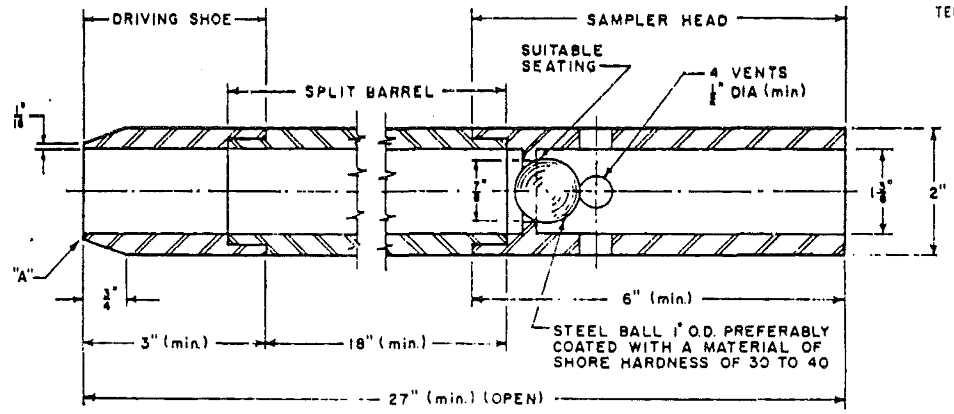
TELEPHONE AREA CODE 315/437-1429




Note 1 – Split barrel may be 1-1/2 in. inside diameter provided it contains a liner of 16-gage wall thickness.

Note 2 – Core retainers in the driving shoe to prevent loss of sample are permitted.

Note 3 – The corners at A may be slightly rounded.

**Table of Metric Equivalents.**

| In. | Mm | Cm | In. | Mm | Cm |
|---|---|---|---|---|---|
| 1/16 (16 gage) | 1.5 | ... | 2 | ... | 5.08 |
| 1/2 | 12.7 | ... | 3 | ... | 7.62 |
| 3/4 | 19.0 | 1.90 | 6 | ... | 15.24 |
| 7/8 | 22.2 | 2.22 | 18 | ... | 45.72 |
| 1-3/8 | 34.9 | 3.49 | 27 | 68.58 | |
| 1-1/2 | 38.1 | 3.81 | | | |

Fig. 1 – Standard Split Barrel Sampler Assembly

3. Procedure

3.1 Clear out the hole to sampling elevation using equipment that will ensure that the material to be sampled is not disturbed by the operation. In saturated sands and silts withdraw the drill bit slowly to prevent loosening of the soil around the hole. Maintain the water level in the hole at or above ground water level.

3.2 In no case shall a bottom-discharge bit be permitted. (Side-discharge bits are permissible.) The process of jetting through an open-tube sampler and then sampling when the desired depth is reached shall not be permitted. Where casing is used, it may not be driven below sampling elevation. Record any loss of circulation or excess pressure in drilling fluid during advancing of holes.

3.3 With the sampler resting on the bottom of the hole, drive the sampler with blows from the 140-lb (63.5 kg) hammer falling 30 in. (0.76 m) until either 18 in. (0.45 m) have been penetrated or 100 blows have been applied.

3.4 Repeat this operation at intervals not longer than 5 ft (1.5 m) in homogeneous strata and at every change of strata.

3.5 Record the number of blows required to effect each 6 in. (0.15 m) of penetration or fractions thereof. The first 6 in. (0.15 m) is considered to be a seating drive. The number of blows required for the second and third 6 in. (0.15 m) of penetration added is termed the penetration resistance, N. If the sampler is driven less than 18 in. (0.45 m), the penetration resistance is that for the last 1 ft (0.30 m) of penetration (if less than 1 ft (0.30 m) is penetrated, the logs shall state the number of blows and the fraction of 1 ft (0.30 m) penetrated).

3.6 Bring the sampler to the surface and open. Describe carefully typical samples of soils recovered as to composition, structure, consistency, color, and condition; then put into jars without ramming. Seal them with wax or hermetically seal to prevent evaporation of the soil moisture. Affix labels to the jar or make notations on the covers (or both) bearing job designation, boring number, sample number, depth penetration record, and length of recovery. Protect samples against extreme temperature changes.

4. Report

4.1 Data obtained in borings shall be recorded in the field and shall include the following:

4.1.1 Name and location of job,
4.1.2 Date of boring – start, finish,
4.1.3 Boring number and coordinate, if available,
4.1.4 Surface elevation, if available,
4.1.5 Sample number and depth,
4.1.6 Method of advancing sampler, penetration and recovery lengths,
4.1.7 Type and size of sampler,
4.1.8 Description of soil,
4.1.9 Thickness of layer,
4.1.10 Depth to water surface; to loss of water; to artesian head; time at which reading was made,
4.1.11 Type and make of machine,
4.1.12 Size of casing, depth of cased hole,
4.1.13 Number of blows per 6 in. (0.15 m)
4.1.14 Names of crewmen, and
4.1.15 Weather, remarks.

[1]Under the standardization procedure of the Society, this method is under the jurisdiction of the ASTM Committee D-18 on Soil and Rock for Engineering Purposes. A list of members may be found in the ASTM Year Book.

Current edition accepted October 20, 1967. Originally issued, 1958. Replaces D-1586-64T.

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TELEPHONE AREA CODE 315/437-1429

# GENERAL NOTES

1. Soil boring logs, notes and other data shown are the results of personal observations and interpretations made by Parratt-Wolff, Inc.

Exploration records prepared by our drilling foreman in the field form the basis of all logs, and samples of subsurface materials retained by the driller are observed by technical personnel in our laboratory to check field classifications.

2. Explanation of the classifications and terms:

a. Bedrock — Natural solid mineral matter occurring in great thickness and extent in its natural location. It is classified according to geological type and structure (joints, bedding, etc.) and described as solid, weathered, broken or fragmented depending on its condition.

b. Soils — Sediments or other unconsolidated accumulations of particles produced by the physical and chemical disintegration of rocks and which may or may not contain organic matter.

## PENETRATION RESISTANCE

| *COHESIONLESS SOILS* | | *COHESIVE SOILS* | |
|---|---|---|---|
| Blows Per Ft. | Relative Density | Blows Per Ft. | Consistency |
| 0 to 4 | Very Loose | 0 to 2 | Very Soft |
| 4 to 10 | Loose | 2 to 4 | Soft |
| 10 to 30 | Medium Dense | 4 to 8 | Medium Stiff |
| 30 to 50 | Dense | 8 to 15 | Stiff |
| Over 50 | Very Dense | 10 to 30 | Very Stiff |
| | | Over 30 | Hard |

*Size Component Terms*

| | | | |
|---|---|---|---|
| Boulder | | Larger than 8 inches | |
| Cobble | | 8 inches to 3 inches | |
| Gravel | — coarse | 3 inches to 1 inch | |
| | — medium | 1 inch to 3/8 inch | |
| | — fine | 3/8 inch to 4.76 mm | |
| Sand | — coarse | 4.76 mm to 2.00 mm | (#10 sieve) |
| | — medium | 2.00 mm to 0.42 mm | (#40 sieve) |
| | — fine | 0.42 mm to 0.074 mm | (#200 sieve) |
| Silt and Clay | | Finer than 0.074 mm | |

*Proportion By Weight*

Major component is shown with all letters capitalized.

Minor component percentage terms of total sample are:

| | |
|---|---|
| and | 35 to 50 percent |
| some | 20 to 35 percent |
| little | 10 to 20 percent |
| trace | 1 to 10 percent |

c. Gradation Terms — The terms coarse, medium and fine are used to describe gradation of Sand and Gravel.

d. The terms used to describe the various soil components and proportions are arrived at by visual estimates of the recovered soil samples. Other terms are used when the recovered samples are not truly representative of the natural materials, such as soil containing numerous cobbles and boulders which cannot be sampled, thinly stratified soils, organic soils, and fills.

e. Ground water — The measurement was made during exploration work or immediately after completion, unless otherwise noted. The depth recorded is influenced by exploration methods, soil type and weather conditions during exploration. Where no water was observed it is so indicated. It is anticipated that the ground water will rise during periods of wet weather. In addition, perched ground water above the water levels indicated (or above the bottom of the hole where no ground water is indicated) may be encountered at changes in soil strata or top of rock.

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# A BRIEF DESCRIPTION OF THE UNIFIED SOIL SYSTEM

The Unified Classification System is an engineering soil classification that is an outgrowth of the Air-Field classification developed by Casagrande.

The system incorporates the textural characteristics of a soil into the engineering classification. All soils are classified into fifteen groups, each group being designated by two letters. These letters are as follows: G—gravel, S—sand, M—Non plastic or low plasticity fines, C—plastic fines, Pt—peat, humus and swamp soils, O—organic, W—well graded, P—poorly graded, L—low liquid limit, H—high liquid limit.

**GW and SW Groups**

These groups comprise well graded gravelly and sandy soils which contain less than 5% of non plastic fines passing a #200 sieve. Fines which are present must not noticeably change the strength characteristics of the coarse grain fraction and must not interfere with its free draining characteristics. In areas subject to frost action the material should not contain more than about 3% of soil grains smaller than .02 millimeters in size.

**GP and SP Groups**

These groups are poorly graded gravels and sands containing less than 5% non plastic fines. They may consist of uniform gravels, uniform sands, or non uniform mixtures of very coarse material and very fine sand with intermediate sizes lacking. Materials of this latter type are sometimes referred to as skip graded, cap graded, or step graded.

**GM and SM Groups**

In general, these groups include gravels or sands which contain more than 12% of fines having little or no plasticity. The plasticity index and liquid limit of a soil in either of these groups plot below the "A" line on a plasticity chart. Gradation is not important and both low grade and poorly graded materials are included. Some sands and gravels in these groups may have a binder composed of natural cementing agents so proportioned that the mixture shows negligible swelling or shrinkage. Thus, the dry strength is provided by a small amount of soil binder or dry cementation of calcareous materials or iron oxide. A fine fraction of non cemented materials may be composed of silts or rock flour types having little or no plasticity, and the mixture will exhibit no dry strength.

**GC and SC Groups**

These groups comprise gravelly or sandy soils with more than 12% of fines which exhibit either low or high plasticity. The plasticity index and liquid limit of a soil in either of these groups plot above the "A" line on the plasticity chart. Gradation of these materials is not important. Plasticity of the binder fraction has more influence on the behavior of the soils than does the variation in gradation. A fine fraction is generally composed of clays.

**ML and MH Groups**

These groups include predominantly silty materials and micaceous or diatomaceous soils. An arbitrary division between the two groups has been established with a liquid limit of 50. Soils in these groups are sandy silts, clayey silts or organic silts with relatively low plasticity. Also included are loessial soils and rock flours. Micaceous and diatomaceous soils generally fall within the MH group, but may extend into the ML group when their liquid limit is less than 50. The same is true for certain types of kaolin clays and some illite clays having relatively low plasticity.

**CL and CH Groups**

The CL and CH groups embrace clays with low and high liquid limits respectively. They are primarily inorganic clays. Low plasticity clays are classified as CL and are usually lean clays, sandy clays, and silty clays. The medium plasticity and high plasticity clays are classified as CH. These include fat clays, gumbo clays, certain volcanic clays and bentonite.

**OL and OH Groups**

The soils in these groups are characterized by the presence of organic matter including organic silts and clays. They have a plasticity range that corresponds with the ML and MH groups.

**Pt Group**

Highly organic soils which are very compressible have undesirable construction characteristics and are classified in one group with the symbol Pt. Peat, humus and swamp soils with a highly organic texture are typical of the group. Particles of leaves, grass, branches of bushes and other fibrous vegetable matter are common components of these soils.

**Borderline Classification**

Soils in the GW, SW, GP and SP groups are non plastic materials having less than 5% passing the #200 sieve, while GM, SM, GC, and SC soils have more than 12% passing the #200 sieve. When these coarse grain materials contain between 5% and 12% of fines they are classified as borderline, and are designated by the dual symbol such as GW-GM. Similarly coarse grain soils which have less than 5% passing the #200 sieve, but which are not free draining or in which the fine fraction exhibits plasticity are also classed as borderline and are given a dual symbol. Still another type of borderline classification occurs when a liquid limit of a fine grain soil is less than 29 and the plasticity index lies in the range of four to seven. These limits are indicated by the shaded area on the plasticity chart.

**Silty and Clayey**

In the Unified System, these terms are used to describe soils whose Atterberg limits plot below and above the "A" line on the plasticity chart. The adjectives silty and clayey are used to describe soils whose limits plot close to the "A" line.

# SOIL CLASSIFICATION SYSTEM

| MAJOR DIVISIONS | | | GROUP SYMBOLS | TYPICAL NAMES |
|---|---|---|---|---|
| COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size) | GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size) | CLEAN GRAVELS (Little or no fines) | GW | Well graded gravels, gravel - sand mixtures, little or no fines. |
| | | | GP | Poorly graded gravels or gravel - sand mixtures, little or no fines. |
| | | GRAVELS WITH FINES (Appreciable amt. of fines) | GM | Silty gravels, gravel - sand - silt mixtures. |
| | | | GC | Clayey gravels, gravel - sand - clay mixtures. |
| | SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size) | CLEAN SANDS (Little or no fines) | SW | Well graded sands, gravelly sands, little or no fines. |
| | | | SP | Poorly graded sands or gravelly sands, little or no fines. |
| | | SANDS WITH FINES (Appreciable amt. of fines) | SM | Silty sands, sand-silt mixtures. |
| | | | SC | Clayey sands, sand-clay mixtures. |
| FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size) | SILTS AND CLAYS (Liquid limit LESS than 50) | | ML | Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity. |
| | | | CL | Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays. |
| | | | OL | Organic silts and organic silty clays of low plasticity. |
| | SILTS AND CLAYS (Liquid limit GREATER than 50) | | MH | Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts. |
| | | | CH | Inorganic clays of high plasticity, fat clays. |
| | | | OH | Organic clays of medium to high plasticity, organic silts. |
| HIGHLY ORGANIC SOILS | | | Pt | Peat and other highly organic soils. |

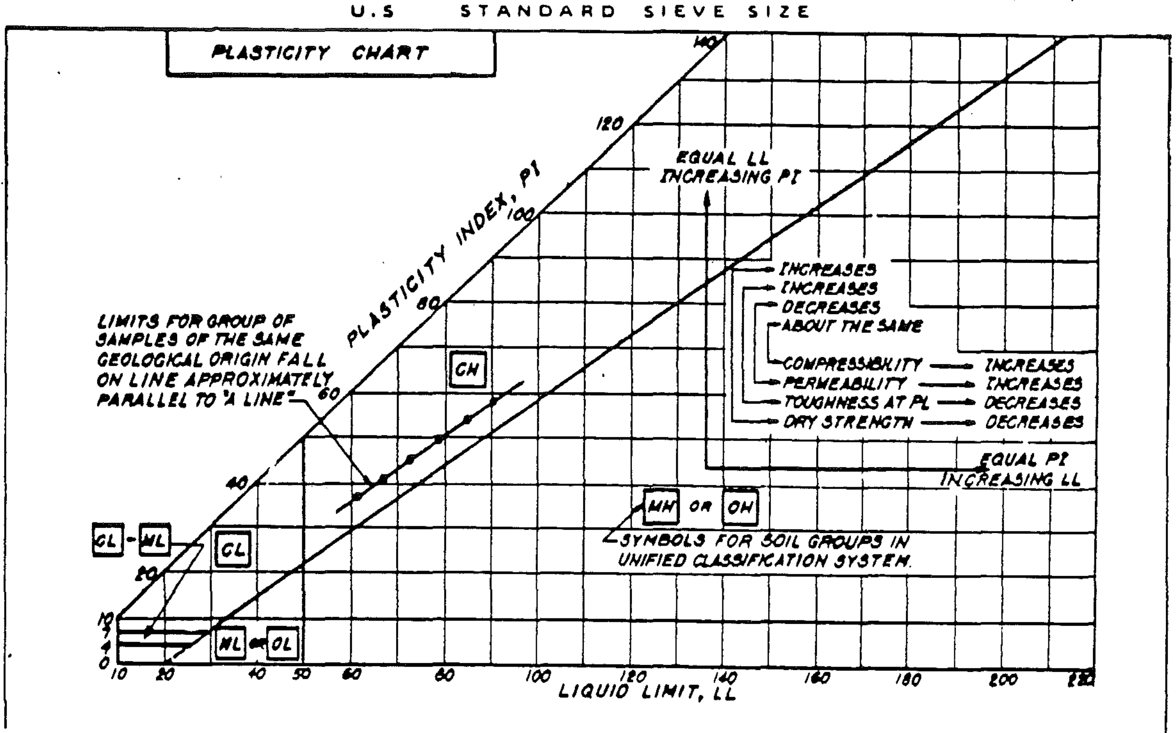
BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

PARTICLE SIZE LIMITS

| SILT OR CLAY | SAND | | | GRAVEL | | COBBLES | BOULDERS |
|---|---|---|---|---|---|---|---|
| | FINE | MEDIUM | COARSE | FINE | COARSE | | |

No. 200   No. 40   No. 10   No. 4   ¾ in.   3 in.   (12 in.)

U.S STANDARD SIEVE SIZE



parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite Site Investigation
LOCATION Syracuse, New York

HOLE NO. B-1-86-774
SURF. EL.
JOB NO. 85186

DATE STARTED 11/17/86 DATE COMPLETED 11/17/86

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

GROUND WATER DEPTH
WHILE DRILLING 7.5'
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED 7.3'

CASING TYPE - HOLLOW STEM AUGER

SHEET 1 OF 1
File #1194.004.130

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 4/9 | | TOPSOIL | 0.5' |
| | 2.0' | | | 10/40 | 19 | Black moist medium dense CINDERS | 1.5' |
| | 2.0'- | 2 | | 9/10 | | CONCRETE | 2.0' |
| | 4.0' | | | 10/11 | 20 | Brown moist very stiff SILT, little | |
| 5.0 | 4.0'- | 3 | | 6/4 | | coarse to fine sand, trace cinders | |
| | 6.0' | | | 5/6 | 9 | | 6.5' |
| | 6.0'- | 4 | | 8/15 | | Red wet dense BRICKS and RUBBLE | |
| WL | 8.0' | | | 18/15 | 33 | FILL | 8.5' |
| | 8.0'- | 5 | | 8/1 | | Brown moist very soft SILT, little fine | |
| 10.0 | 10.0' | | | 1/4 | 2 | to medium gravel | 10.5' |
| | 10.0'- | 6 | | 9/18 | | Brown moist hard SILT with embedded | |
| | 12.0' | | | 20/50 | 38 | fine to coarse sand and fine to coarse | |
| | 12.0'- | 7 | | 23/30 | | gravel, trace clay | |
| | 14.0' | | | 38/35 | 68 | | |
| 15.0 | 14.0'- | 8 | | 11/23 | | | |
| | 16.0' | | | 41/66 | 64 | | |
| | | | | | | Bottom of Boring | 16.0' |
| | | | | | | Note: Installed observation well to 15.0' on completion of boring. | |
| 20.0 | | | | | | | |

parratt wolff inc

# TEST BORING LOG

FISHER ROAD
EAST SYRACUSE, N.Y. 13057

PROJECT Prestolite Site Investigation
LOCATION Syracuse, New York

HOLE NO. B-2-86-775
SURF. EL.

DATE STARTED 11/17/86 DATE COMPLETED 11/17/86

JOB NO. 85186

GROUND WATER DEPTH
WHILE DRILLING Dry
BEFORE CASING REMOVED Dry
AFTER CASING REMOVED Dry

N — NO. OF BLOWS TO DRIVE SAMPLER 12" W/140# HAMMER FALLING 30" — ASTM D-1586, STANDARD PENETRATION TEST

C — NO. OF BLOWS TO DRIVE CASING 12" W/ # HAMMER FALLING "/OR — % CORE RECOVERY

CASING TYPE - HOLLOW STEM AUGER

SHEET 1 OF 1
File #1194.004.130

| DEPTH | SAMPLE DEPTH | SAMPLE NUMBER | C | SAMPLE DRIVE RECORD PER 6" | N | DESCRIPTION OF MATERIAL | STRATA CHANGE DEPTH |
|---|---|---|---|---|---|---|---|
| | 0.0'- | 1 | | 3/6 | | Black moist loose CINDERS | 0.5' |
| | 2.0' | | | 7/7 | 13 | Brown moist stiff SILT, some coarse to | |
| | 2.0'- | 2 | | 5/7 | | fine sand, little fine gravel, trace | |
| | 4.0' | | | 4/6 | 11 | cinders, trace wood | 4.0' |
| 5.0 | 4.0'- | 3 | | 7/9 | | Brown wet stiff CLAY, little silt, little | |
| | 6.0' | | | 12/12 | 21 | fine to medium sand | 5.0' |
| | 6.0'- | 4 | | 12/11 | | Brown moist to wet very stiff to medium | |
| | 8.0' | | | 11/11 | 22 | stiff SILT with embedded fine to coarse | |
| | 8.0'- | 5 | | 3/3 | | sand and fine to coarse gravel | |
| 10.0 | 10.0' | | | 4/6 | 7 | | |
| | 10.0'- | 6 | | 3/9 | | | |
| | 12.0' | | | 15/22 | 24 | | |
| | 12.0'- | 7 | | 20/34 | | | |
| | 14.0' | | | 38/40 | 72 | | |
| 15.0 | 14.0'- | 8 | | 13/22 | | | |
| | 16.0' | | | 29/53 | 51 | | |
| | 16.0'- | 9 | | 63 | | Bottom of Boring | 16.5' |
| | 16.5' | | | | | | |
| | | | | | | Note: Installed observation well to | |
| 20.0 | | | | | | 15.0' on completion of boring. | |

# ATTACHMENT 4A

# GROUND WATER ANALYTICAL RESULTS

OBG LABORATORIES, INC.

# Laboratory Report

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION

DATE COLLECTED See below DATE REC'D. 6-8-87 DATE ANALYZED

| Description | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-6 |
|---|---|---|---|---|---|---|
| Date Collected | 6-5-87 | 6-4-87 | 6-4-87 | 6-4-87 | 6-5-87 | 6-5-87 |
| Sample # | D6736 | D6737 | D6738 | D6739 | D6740 | D6741 |
| OIL & GREASE | 1. | 3. | 2. | 3. | 6. | 3. |
| CYANIDE | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| TOTAL ORGANIC CARBON | 260. | 52. | 120. | 57. | 46. | 190. |
| TOX (ppb) | 11./<10. | <10./<10. | <10./<10. | <10./<10. | <10./11. | 100./97. |
| PHENOL | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| CADMIUM | 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| CHROMIUM | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| COPPER | 0.04 | <0.01 | <0.01 | 0.02 | 0.01 | 0.01 |
| IRON | <0.05 | <0.05 | <0.05 | <0.05 | 0.10 | <0.05 |
| ZINC | 0.02 | <0.01 | <0.01 | 0.01 | 0.01 | 0.01 |
| NICKEL | 0.06 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| LEAD | 0.13 | 0.07 | 0.09 | 0.06 | 0.13 | 0.05 |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Units:** mg/ℓ (ppm) unless otherwise noted

**Comments:**

Authorized: D. R. Brandon

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

LABORATORIES, INC.

# Laboratory Report

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION

DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED

| Description | MW-7 | MW-8 | MW-9 | MW-10 | MW-11 |
|---|---|---|---|---|---|
| Date Collected | 6-5-87 | 6-5-87 | 6-5-87 | 6-5-87 | 6-5-87 |
| Sample # | D6742 | D6743 | D6744 | D6745 | D6746 |
| OIL & GREASE | 9. | 9. | 4. | 3. | 4. |
| CYANIDE | 3.8 | <0.05 | <0.05 | <0.05 | <0.05 |
| TOTAL ORGANIC CARBON | 240. | 240. | 260. | 410. | 130. |
| TOX (ppb) | 53./48. | 19./24. | 16./19. | 16./16. | <10./<10. |
| PHENOL | 0.009 | - | - | - | - |
| CADMIUM | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| CHROMIUM | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| COPPER | 0.01 | - | - | <0.01 | <0.01 |
| IRON | 0.50 | - | - | <0.05 | <0.05 |
| ZINC | 0.02 | - | - | <0.01 | 0.01 |
| NICKEL | <0.05 | - | - | <0.05 | <0.05 |
| LEAD | <0.05 | 0.07 | 0.09 | 0.07 | 0.11 |
| ARSENIC | - | <0.005 | <0.005 | - | - |
| BARIUM | - | <0.5 | <0.5 | - | - |
| MERCURY | - | <0.0005 | <0.0005 | - | - |
| SELENIUM | - | <0.005 | <0.005 | - | - |
| SILVER | - | <0.01 | <0.01 | - | - |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Units:** mg/ℓ (ppm) unless otherwise noted

**Comments:**

Authorized: D. A. Brandow

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

LABORATORIES, INC.

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-1

SAMPLE NO. D6736 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-30-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | ↓ | Trichloroethene | ↓ |
| Vinyl chloride | ↓ | Benzene | ↓ |
| Chloroethane | ↓ | Dibromochloromethane | ↓ |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | ↓ |
| 1,1-Dichloroethene | ↓ | c-1,3-Dichloropropene | ↓ |
| 1,1-Dichloroethane | ↓ | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | ↓ | Bromoform | <5. |
| Chloroform | ↓ | 1,1,2,2-Tetrachloroethane | ↓ |
| 1,2-Dichloroethane | ↓ | Tetrachloroethene | ↓ |
| 1,1,1-Trichloroethane | ↓ | Toluene | ↓ |
| Carbon tetrachloride | ↓ | Chlorobenzene | ↓ |
| Bromodichloromethane | ↓ | Ethylbenzene | ↓ |
| 1,2-Dichloropropane | ↓ | Xylenes | ↓ |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D.A. Brandon

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

**LABORATORIES, INC.**

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-2

SAMPLE NO. D6737 DATE COLLECTED 6-4-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-30-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | | Bromoform | <5. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

Authorized: D. A. Brondou

Date: July 2, 1987

**OBG LABORATORIES, INC.**

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-3

SAMPLE NO. D6738 DATE COLLECTED 6-4-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-30-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | | Bromoform | <5. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

Authorized: D.A. Blandon

Date: July 2, 1987

OBG LABORATORIES, INC.

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-4

SAMPLE NO. D6739 DATE COLLECTED 6-4-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-30-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | | Bromoform | <5. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D. N. Bendon

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

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LABORATORIES, INC.

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-5

SAMPLE NO. D6740 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-30-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | | Bromoform | <5. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D.A. Brondou

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

**OBG LABORATORIES, INC.**

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-6

SAMPLE NO. D6741 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-30-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | | Bromoform | <5. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D.A. Brandon

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

OBG
LABORATORIES, INC.

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-7

SAMPLE NO. D6742 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-10-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | | Bromoform | <5. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D.N. Broedon

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

**OBG LABORATORIES, INC.**

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-8

SAMPLE NO. D6743 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-11-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | ↓ | Trichloroethene | ↓ |
| Vinyl chloride | ↓ | Benzene | ↓ |
| Chloroethane | ↓ | Dibromochloromethane | ↓ |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | ↓ |
| 1,1-Dichloroethene | ↓ | c-1,3-Dichloropropene | ↓ |
| 1,1-Dichloroethane | ↓ | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | ↓ | Bromoform | <5. |
| Chloroform | ↓ | 1,1,2,2-Tetrachloroethane | ↓ |
| 1,2-Dichloroethane | ↓ | Tetrachloroethene | ↓ |
| 1,1,1-Trichloroethane | ↓ | Toluene | ↓ |
| Carbon tetrachloride | ↓ | Chlorobenzene | ↓ |
| Bromodichloromethane | ↓ | Ethylbenzene | ↓ |
| 1,2-Dichloropropane | ↓ | Xylenes | ↓ |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D.A. Brandon

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

**OBG LABORATORIES, INC.**

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-9

SAMPLE NO. D6744 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-11-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | | Bromoform | <5. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D. A. Brandon

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

**OBG LABORATORIES, INC.**

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-10

SAMPLE NO. D6745 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-11-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | | Bromoform | <5. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

Authorized: D.A. Brandon

Date: July 2, 1987

**OBG LABORATORIES, INC.**

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-11

SAMPLE NO. D6746 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-11-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <10. | t-1,3-Dichloropropene | <5. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <5. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <10. |
| t-1,2-Dichloroethene | | Bromoform | <5. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D. N. Brandon

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

**LABORATORIES, INC.**

# Base/Neutral Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-8

SAMPLE NO. D6743 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-19-87

| | ppb | | ppb |
|---|---|---|---|
| 1,3-Dichlorobenzene | <10. | Diethylphthalate | <10. |
| 1,4-Dichlorobenzene | | N-nitrosodiphenylamine | |
| 1,2-Dichlorobenzene | | Hexachlorobenzene | |
| Hexachloroethane | | 4-Bromophenyl phenyl ether | |
| Bis (2-chloroethyl) ether | | Phenanthrene | |
| Bis (2-chloroisopropyl) ether | | Anthracene | |
| N-Nitrosodi-n-propylamine | | Di-n-butyl phthalate | |
| Nitrobenzene | | Fluoranthene | |
| Hexachlorobutadiene | | Pyrene | |
| 1,2,4-Trichlorobenzene | | Benzidine | <50. |
| Isophorone | | Butyl benzyl phthalate | <10. |
| Naphthalene | | Bis(2-ethylhexyl)phthalate | |
| Bis (2-chloroethoxy) methane | | Chrysene | |
| Hexachlorocyclopentadiene | | Benzo(a)anthracene | |
| 2-Chloronaphthalene | | 3,3-Dichlorobenzidine | <20. |
| Acenaphthylene | | Di-n-octylphthalate | <10. |
| Acenaphthene | | Benzo(b)fluoranthene | |
| Dimethyl phthalate | | Benzo(k)fluoranthene | |
| 2,6-Dinitrotoluene | | Benzo(a)pyrene | |
| Fluorene | | Indeno(1,2,3-cd)pyrene | |
| 4-Chlorophenyl phenyl ether | | Dibenzo(a,h)anthracene | |
| 2,4-Dinitrotoluene | | Benzo(g,h,i)perylene | |
| 1,2-Diphenylhydrazine | | N-Nitrosodimethyl Amine | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D. A. Brondon

Date: July 2, 1987

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

**OBG LABORATORIES, INC.**

# Acid Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-8

SAMPLE NO. D6743 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-19-87

| | ppb | | ppb |
|---|---|---|---|
| 2-Chlorophenol | <10. | 2,4,6-Trichlorophenol | <10. |
| 2-Nitrophenol | ↓ | 4-Chloro-3-methylphenol | ↓ |
| Phenol | ↓ | 2,4-Dinitrophenol | <50. |
| 2,4-Dimethylphenol | ↓ | 2-Methyl-4,6-dinitrophenol | ↓ |
| 2,4-Dichlorophenol | ↓ | Pentachlorophenol | ↓ |
| | | 4-Nitrophenol | ↓ |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

**Authorized:** D. A. Brandon

**Date:** July 2, 1987

**LABORATORIES, INC.**

# Base/Neutral Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-9

SAMPLE NO. D6744 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-19-87

| | ppb | | ppb |
|---|---|---|---|
| 1,3-Dichlorobenzene | <10. | Diethylphthalate | <10. |
| 1,4-Dichlorobenzene | | N-nitrosodiphenylamine | |
| 1,2-Dichlorobenzene | | Hexachlorobenzene | |
| Hexachloroethane | | 4-Bromophenyl phenyl ether | |
| Bis (2-chloroethyl) ether | | Phenanthrene | |
| Bis (2-chloroisopropyl) ether | | Anthracene | |
| N-Nitrosodi-n-propylamine | | Di-n-butyl phthalate | |
| Nitrobenzene | | Fluoranthene | |
| Hexachlorobutadiene | | Pyrene | |
| 1,2,4-Trichlorobenzene | | Benzidine | <50. |
| Isophorone | | Butyl benzyl phthalate | |
| Naphthalene | | Bis(2-ethylhexyl)phthalate | |
| Bis (2-chloroethoxy) methane | | Chrysene | |
| Hexachlorocyclopentadiene | | Benzo(a)anthracene | |
| 2-Chloronaphthalene | | 3,3-Dichlorobenzidine | <20. |
| Acenaphthylene | | Di-n-octylphthalate | <10. |
| Acenaphthene | | Benzo(b)fluoranthene | |
| Dimethyl phthalate | | Benzo(k)fluoranthene | |
| 2,6-Dinitrotoluene | | Benzo(a)pyrene | |
| Fluorene | | Indeno(1,2,3-cd)pyrene | |
| 4-Chlorophenyl phenyl ether | | Dibenzo(a,h)anthracene | |
| 2,4-Dinitrotoluene | | Benzo(g,h,i)perylene | |
| 1,2-Diphenylhydrazine | | N-Nitrosodimethyl Amine | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D. A. Brandon

Date: July 2, 1987

OBG Laboratories, Inc.
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**LABORATORIES, INC.**

# Acid Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-9

SAMPLE NO. D6744 DATE COLLECTED 6-5-87 DATE REC'D. 6-8-87 DATE ANALYZED 6-19-87

| | ppb |
|---|---|
| 2-Chlorophenol | <10. |
| 2-Nitrophenol | |
| Phenol | |
| 2,4-Dimethylphenol | |
| 2,4-Dichlorophenol | |
| 2,4,6-Trichlorophenol | <10. |
| 4-Chloro-3-methylphenol | |
| 2,4-Dinitrophenol | <50. |
| 2-Methyl-4,6-dinitrophenol | |
| Pentachlorophenol | |
| 4-Nitrophenol | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: D.A. Brondou

Date: July 2, 1987

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# ATTACHMENT 5A

# SOIL ANALYTICAL RESULTS

OBG
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# Laboratory Report

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW-11 21'-22'

mg/kg wet weight

DATE COLLECTED 5-27-87 DATE REC'D. 5-28-87 DATE ANALYZED

| Sample # | A6471 | | | | |
|---|---|---|---|---|---|
| OIL & GREASE | 240. | | | | |
| CYANIDE | <5. | | | | |
| LEAD | 79. | | | | |
| ARSENIC | 9.0 | | | | |
| BARIUM | <50. | | | | |
| CADMIUM | 2. | | | | |
| CHROMIUM | 11. | | | | |
| MERCURY | <0.5 | | | | |
| SELENIUM | <0.5 | | | | |
| SILVER | 1. | | | | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Units:** mg/ℓ (ppm) unless otherwise noted

**Comments:**

Authorized: D. A. Bronson

Date: June 26, 1987

OBG Laboratories, Inc.
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OBG LABORATORIES, INC.

# Laboratory Report

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION

DATE COLLECTED 5-27-87 DATE REC'D. 5-28-87 DATE ANALYZED

| | Sample # | OIL & GREASE | LEAD | PHENOLS |
|---|---|---|---|---|
| D-2 0' mg/kg wet weight | A6472 | 42. | 140. | 0.4 |
| D-2 2' " | D6473 | 410. | 230. | 0.2 |
| D-2 4' " | D6474 | 400. | 59. | 2.1 |
| F-1 Surface EP TOX | D6475 | - | 0.19 | - |
| D-3 0' mg/kg wet weight | D6476 | 520. | 69. | 0.3 |
| D-3 2' " | D6477 | 320. | 56. | 0.1 |
| D-3 4' " | D6478 | 230. | 27. | <0.1 |
| D-4 0' " | D6479 | 560. | 210. | 0.7 |
| D-4 2' " | D6480 | 230. | 37. | 0.1 |
| D-4 4' " | D6481 | 190. | 59. | <0.1 |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Units:** mg/ℓ (ppm) unless otherwise noted

**Comments:**

**Authorized:** D. A. Bendon

**Date:** June 26, 1987

OBG Laboratories, Inc.
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OBG LABORATORIES, INC.

# Laboratory Report

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION

DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED

| Description | MW8 0'-3' | MW8 6'-8' | MW9 0'-3' | MW9 6'-8' | MW10 2'-4' | MW10 6'-8' | MW11 4'-6' | H1 6'-9' | H2/H3 5' | E1 0'-2' | #1 0'-12' Comp. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample # | D6426 | D6427 | D6428 | D6429 | D6430 | D6431 | D6432 | D6433 | D6434 | D6435 | D6436 |
| ARSENIC | <0.005 | <0.005 | <0.005 | <0.005 | 3.8 | 7.4 | 9.1 | <0.005 | <0.005 | - | - |
| BARIUM | 1.0 | 1.7 | 0.9 | 1.0 | <50. | 70. | <50. | 0.9 | 1.6 | - | - |
| CADMIUM | 0.03 | 0.07 | 0.03 | <0.01 | 1. | 3. | 2. | <0.01 | 0.07 | - | - |
| CHROMIUM | <0.05 | <0.05 | <0.05 | <0.05 | <5. | 6. | 6. | <0.05 | <0.05 | - | - |
| LEAD | 0.27 | 0.56 | 0.25 | 0.07 | 11. | 25. | 24. | <0.05 | 0.46 | 0.26 | 0.19 |
| MERCURY | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.5 | <0.5 | <0.5 | <0.0005 | <0.0005 | - | - |
| SELENIUM | <0.005 | <0.005 | <0.005 | <0.005 | <0.5 | <0.5 | <0.5 | <0.005 | <0.005 | - | - |
| SILVER | 0.01 | 0.02 | 0.01 | <0.01 | <1. | 1. | 1. | <0.01 | 0.03 | - | - |
| OIL & GREASE | - | - | - | - | 59. | 140. | <1. | <1. | 1330. | 20500. | 4300. |
| COPPER | - | - | - | - | 8. | 13. | 24. | - | - | - | - |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Units:** mg/l (ppm) unless otherwise noted

**Comments:**

Authorized: [signature]

Date: June 22, 1987

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OBG LABORATORIES, INC.

# Laboratory Report

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION Soils

DATE COLLECTED 5-26-87 DATE REC'D. 5-26-87 DATE ANALYZED

| Description | K1-2' | K1-4' | E4-2' | E4 18'-20.5' | K2-2' | E3-2' | E5-10' | #6-10' | E3 10'-20' Comp. | E2-2' | E2 14'-16.5' | K3 Surface | K4 Surface | K5 Surface |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample # | D6438 | D6439 | D6440 | D6441 | D6442 | D6443 | D6444 | D6445 | D6446 | D6447 | D6448 | D6449 | D6450 | D6451 |
| CYANIDE | 14. | <5. | - | - | <5. | - | - | - | - | - | - | <5. | <5. | <5. |
| OIL & GREASE | 940. | 360. | 910. | 710. | 250. | 550. | <1. | <1. | 1300. | 790. | 34. | 470. | 1500. | 1500. |
| LEAD | 72. | 59. | 0.67 | 0.56 | 23. | 0.73 | 0.40 | 0.35 | 0.86 | 0.71 | 0.25 | 110. | 250. | 84. |
| ARSENIC | 23. | 18. | - | - | -38. | - | - | - | - | - | - | 4.4 | 5.4 | 4.1 |
| BARIUM | <50. | <50. | - | - | <50. | - | - | - | - | - | - | 140. | 90. | 180. |
| CADMIUM | 3. | 2. | - | - | 2. | - | - | - | - | - | - | 10. | 6. | 4. |
| CHROMIUM | 36. | 18. | - | - | 11. | - | - | - | - | - | - | 14. | 18. | 9. |
| MERCURY | <0.5 | <0.5 | - | - | <0.5 | - | - | - | - | - | - | <0.5 | <0.5 | <0.5 |
| SELENIUM | <0.5 | <0.5 | - | - | <0.5 | - | - | - | - | - | - | <0.5 | <0.5 | <0.5 |
| SILVER | <1. | <1. | - | - | 1. | - | - | - | - | - | - | 3. | 3. | 3. |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Units:** mg/ℓ (ppm) unless otherwise noted

**Comments:**

Authorized: D. R. Brandon

Date: June 22, 1987

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OBG LABORATORIES, INC.

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW8 0'-3'

SAMPLE NO. D6426 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-9-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <40. | t-1,3-Dichloropropene | <20. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <20. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <40. |
| t-1,2-Dichloroethene | | Bromoform | <20. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | 17.J | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:** J = detected but below method detection limit

Authorized: [signature]

Date: June 23, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

LABORATORIES, INC.

# Base/Neutral Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW8 0'-3'

SAMPLE NO. D6426 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 1,3-Dichlorobenzene | <330. | Diethylphthalate | <330. |
| 1,4-Dichlorobenzene | | N-nitrosodiphenylamine | |
| 1,2-Dichlorobenzene | | Hexachlorobenzene | |
| Hexachloroethane | | 4-Bromophenyl phenyl ether | |
| Bis (2-chloroethyl) ether | | Phenanthrene | 270.J |
| Bis (2-chloroisopropyl) ether | | Anthracene | |
| N-Nitrosodi-n-propylamine | | Di-n-butyl phthalate | |
| Nitrobenzene | | Fluoranthene | 260.J |
| Hexachlorobutadiene | | Pyrene | 240.J |
| 1,2,4-Trichlorobenzene | | Benzidine | <1650. |
| Isophorone | | Butyl benzyl phthalate | <330. |
| Naphthalene | | Bis(2-ethylhexyl)phthalate | 1250.B |
| Bis (2-chloroethoxy) methane | | Chrysene | <330. 220.J |
| Hexachlorocyclopentadiene | | Benzo(a)anthracene | <330. 240.J |
| 2-Chloronaphthalene | | 3,3-Dichlorobenzidine | <660. |
| Acenaphthylene | | Di-n-octylphthalate | <330. |
| Acenaphthene | | Benzo(b)fluoranthene | 190.J |
| Dimethyl phthalate | | Benzo(k)fluoranthene | 180.J |
| 2,6-Dinitrotoluene | | Benzo(a)pyrene | 110.J |
| Fluorene | | Indeno(1,2,3-cd)pyrene | |
| 4-Chlorophenyl phenyl ether | | Dibenzo(a,h)anthracene | |
| 2,4-Dinitrotoluene | | Benzo(g,h,i)perylene | |
| 1,2-Diphenylhydrazine | | N-Nitrosodimethyl Amine | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:** B = method blank had 360ppb of this compound

Authorized: [signature]

Date: June 23, 1987

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LABORATORIES, INC.

# Acid Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW8 0'-3'

SAMPLE NO. D6426 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 2-Chlorophenol | <330. | 2,4,6-Trichlorophenol | <330. |
| 2-Nitrophenol | | 4-Chloro-3-methylphenol | <330. |
| Phenol | | 2,4-Dinitrophenol | <1650. |
| 2,4-Dimethylphenol | | 2-Methyl-4,6-dinitrophenol | |
| 2,4-Dichlorophenol | | Pentachlorophenol | |
| | | 4-Nitrophenol | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized:

Date: June 23, 1987

OBG Laboratories, Inc.
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**OBG LABORATORIES, INC.**

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW8 6'-8'

SAMPLE NO. D6427 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-10-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <40. | t-1,3-Dichloropropene | <20. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <20. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <40. |
| t-1,2-Dichloroethene | | Bromoform | <20. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: [signature]

Date: June 23, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

**OBG LABORATORIES, INC.**

# Base/Neutral Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW8 6'-8'

SAMPLE NO. D6427 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 1,3-Dichlorobenzene | <330. | Diethylphthalate | <330. |
| 1,4-Dichlorobenzene | | N-nitrosodiphenylamine | |
| 1,2-Dichlorobenzene | | Hexachlorobenzene | |
| Hexachloroethane | | 4-Bromophenyl phenyl ether | |
| Bis (2-chloroethyl) ether | | Phenanthrene | |
| Bis (2-chloroisopropyl) ether | | Anthracene | |
| N-Nitrosodi-n-propylamine | | Di-n-butyl phthalate | |
| Nitrobenzene | | Fluoranthene | |
| Hexachlorobutadiene | | Pyrene | |
| 1,2,4-Trichlorobenzene | | Benzidine | <1650. |
| Isophorone | | Butyl benzyl phthalate | <330. |
| Naphthalene | | Bis(2-ethylhexyl)phthalate | 500.B |
| Bis (2-chloroethoxy) methane | | Chrysene | <330. |
| Hexachlorocyclopentadiene | | Benzo(a)anthracene | <330. |
| 2-Chloronaphthalene | | 3,3-Dichlorobenzidine | <660. |
| Acenaphthylene | | Di-n-octylphthalate | <330. |
| Acenaphthene | | Benzo(b)fluoranthene | |
| Dimethyl phthalate | | Benzo(k)fluoranthene | |
| 2,6-Dinitrotoluene | | Benzo(a)pyrene | |
| Fluorene | | Indeno(1,2,3-cd)pyrene | |
| 4-Chlorophenyl phenyl ether | | Dibenzo(a,h)anthracene | |
| 2,4-Dinitrotoluene | | Benzo(g,h,i)perylene | |
| 1,2-Diphenylhydrazine | | N-Nitrosodimethyl Amine | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:** B = method blank had 360ppb of this compound

Authorized: [signature]

Date: June 23, 1987

OBG Laboratories, Inc.
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**LABORATORIES, INC.**

# Acid Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW8 6'-8'

SAMPLE NO. D6427 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 2-Chlorophenol | <330. | 2,4,6-Trichlorophenol | <330. |
| 2-Nitrophenol | ↓ | 4-Chloro-3-methylphenol | <330. |
| Phenol | ↓ | 2,4-Dinitrophenol | <1650. |
| 2,4-Dimethylphenol | ↓ | 2-Methyl-4,6-dinitrophenol | ↓ |
| 2,4-Dichlorophenol | ↓ | Pentachlorophenol | ↓ |
| | | 4-Nitrophenol | ↓ |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494

Authorized: [signature]

Date: June 23, 1987

OBG
LABORATORIES, INC.

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW9 0'-3'

SAMPLE NO. D6428 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-10-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <50. | t-1,3-Dichloropropene | <25. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <25. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <50. |
| t-1,2-Dichloroethene | | Bromoform | <25. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: [illegible]

Date: June 23, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

**OBG LABORATORIES, INC.**

# Base/Neutral Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW9 0'-3'

SAMPLE NO. D6428 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 1,3-Dichlorobenzene | <330. | Diethylphthalate | <330. |
| 1,4-Dichlorobenzene | | N-nitrosodiphenylamine | |
| 1,2-Dichlorobenzene | | Hexachlorobenzene | |
| Hexachloroethane | | 4-Bromophenyl phenyl ether | |
| Bis (2-chloroethyl) ether | | Phenanthrene | 420. |
| Bis (2-chloroisopropyl) ether | | Anthracene | <330. |
| N-Nitrosodi-n-propylamine | | Di-n-butyl phthalate | <330. |
| Nitrobenzene | | Fluoranthene | 510. |
| Hexachlorobutadiene | | Pyrene | 690. |
| 1,2,4-Trichlorobenzene | | Benzidine | <1650. |
| Isophorone | | Butyl benzyl phthalate | <330. |
| Naphthalene | | Bis(2-ethylhexyl)phthalate | 1000.B |
| Bis (2-chloroethoxy) methane | | Chrysene | 600. |
| Hexachlorocyclopentadiene | | Benzo(a)anthracene | 600. |
| 2-Chloronaphthalene | | 3,3-Dichlorobenzidine | <660. |
| Acenaphthylene | | Di-n-octylphthalate | <330. |
| Acenaphthene | | Benzo(b)fluoranthene | 580. |
| Dimethyl phthalate | | Benzo(k)fluoranthene | 400. |
| 2,6-Dinitrotoluene | | Benzo(a)pyrene | 500. |
| Fluorene | | Indeno(1,2,3-cd)pyrene | <330. 300.J |
| 4-Chlorophenyl phenyl ether | | Dibenzo(a,h)anthracene | |
| 2,4-Dinitrotoluene | | Benzo(g,h,i)perylene | 280.J |
| 1,2-Diphenylhydrazine | | N-Nitrosodimethyl Amine | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:** B = method blank had 360ppb of this compound
J =detected but below method detection limit

Authorized: Dalw?

Date: June 23, 1987

OBG Laboratories, Inc.
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**OBG LABORATORIES, INC.**

# Acid Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW9 0'-3'

SAMPLE NO. D6428 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 2-Chlorophenol | <330. | 2,4,6-Trichlorophenol | <330. |
| 2-Nitrophenol | | 4-Chloro-3-methylphenol | <330. |
| Phenol | | 2,4-Dinitrophenol | <1650. |
| 2,4-Dimethylphenol | | 2-Methyl-4,6-dinitrophenol | |
| 2,4-Dichlorophenol | | Pentachlorophenol | |
| | | 4-Nitrophenol | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

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Authorized: [signature]

Date: June 23, 1987

LABORATORIES, INC.

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW9 6'-8'

SAMPLE NO. D6429 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-10-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <50. | t-1,3-Dichloropropene | <25. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <25. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <50. |
| t-1,2-Dichloroethene | | Bromoform | <25. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: [signature]

Date: June 23, 1987

OBG Laboratories, Inc.
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**LABORATORIES, INC.**

# Base/Neutral Priority Pollutants

**CLIENT** PRESTOLITE **JOB NO.** 1194.004.517

**DESCRIPTION** MW9 6'-8'

**SAMPLE NO.** D6429 **DATE COLLECTED** 5-22-87 **DATE REC'D.** 5-26-87 **DATE ANALYZED** 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 1,3-Dichlorobenzene | <330. | Diethylphthalate | <330. |
| 1,4-Dichlorobenzene | | N-nitrosodiphenylamine | |
| 1,2-Dichlorobenzene | | Hexachlorobenzene | |
| Hexachloroethane | | 4-Bromophenyl phenyl ether | |
| Bis (2-chloroethyl) ether | | Phenanthrene | |
| Bis (2-chloroisopropyl) ether | | Anthracene | |
| N-Nitrosodi-n-propylamine | | Di-n-butyl phthalate | |
| Nitrobenzene | | Fluoranthene | |
| Hexachlorobutadiene | | Pyrene | |
| 1,2,4-Trichlorobenzene | | Benzidine | <1650. |
| Isophorone | | Butyl benzyl phthalate | <330. |
| Naphthalene | | Bis(2-ethylhexyl)phthalate | 690.B |
| Bis (2-chloroethoxy) methane | | Chrysene | <330. |
| Hexachlorocyclopentadiene | | Benzo(a)anthracene | <330. |
| 2-Chloronaphthalene | | 3,3-Dichlorobenzidine | <660. |
| Acenaphthylene | | Di-n-octylphthalate | <330. |
| Acenaphthene | | Benzo(b)fluoranthene | |
| Dimethyl phthalate | | Benzo(k)fluoranthene | |
| 2,6-Dinitrotoluene | | Benzo(a)pyrene | |
| Fluorene | | Indeno(1,2,3-cd)pyrene | |
| 4-Chlorophenyl phenyl ether | | Dibenzo(a,h)anthracene | |
| 2,4-Dinitrotoluene | | Benzo(g,h,i)perylene | |
| 1,2-Diphenylhydrazine | | N-Nitrosodimethyl Amine | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:** B = method blank had 360ppb of this compound

OBG Laboratories, Inc.
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**Authorized:**

**Date:** June 23, 1987

LABORATORIES, INC.

# Acid Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION MW9 6'-8'

SAMPLE NO. D6429 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 2-Chlorophenol | <330. | 2,4,6-Trichlorophenol | <330. |
| 2-Nitrophenol | | 4-Chloro-3-methylphenol | <330. |
| Phenol | | 2,4-Dinitrophenol | <1650. |
| 2,4-Dimethylphenol | | 2-Methyl-4,6-dinitrophenol | |
| 2,4-Dichlorophenol | | Pentachlorophenol | |
| | | 4-Nitrophenol | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

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Authorized: D. R. Lee

Date: June 23, 1987

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# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION H1 6'-9'

SAMPLE NO. D6433 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-10-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <50. | t-1,3-Dichloropropene | <25. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <25. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <50. |
| t-1,2-Dichloroethene | | Bromoform | <25. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | 95. |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: [signature]

Date: June 23, 1987

OBG Laboratories, Inc.
Box 4942/1304 Buckley Rd./Syracuse, NY/13221/(315) 457-1494

**OBG LABORATORIES, INC.**

# Base/Neutral Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION H1 6'-9'

SAMPLE NO. D6433 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 1,3-Dichlorobenzene | <330. | Diethylphthalate | <330. |
| 1,4-Dichlorobenzene | | N-nitrosodiphenylamine | |
| 1,2-Dichlorobenzene | | Hexachlorobenzene | |
| Hexachloroethane | | 4-Bromophenyl phenyl ether | |
| Bis (2-chloroethyl) ether | | Phenanthrene | |
| Bis (2-chloroisopropyl) ether | | Anthracene | |
| N-Nitrosodi-n-propylamine | | Di-n-butyl phthalate | |
| Nitrobenzene | | Fluoranthene | |
| Hexachlorobutadiene | | Pyrene | |
| 1,2,4-Trichlorobenzene | | Benzidine | <1650. |
| Isophorone | | Butyl benzyl phthalate | <330. |
| Naphthalene | | Bis(2-ethylhexyl)phthalate | 670.B |
| Bis (2-chloroethoxy) methane | | Chrysene | <330. |
| Hexachlorocyclopentadiene | | Benzo(a)anthracene | <330. |
| 2-Chloronaphthalene | | 3,3-Dichlorobenzidine | <660. |
| Acenaphthylene | | Di-n-octylphthalate | <330. |
| Acenaphthene | | Benzo(b)fluoranthene | |
| Dimethyl phthalate | | Benzo(k)fluoranthene | |
| 2,6-Dinitrotoluene | | Benzo(a)pyrene | |
| Fluorene | | Indeno(1,2,3-cd)pyrene | |
| 4-Chlorophenyl phenyl ether | | Dibenzo(a,h)anthracene | |
| 2,4-Dinitrotoluene | | Benzo(g,h,i)perylene | |
| 1,2-Diphenylhydrazine | | N-Nitrosodimethyl Amine | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:** B = method blank had 310ppb of this compound

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Authorized: [signature]

Date: June 23, 1987

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# Acid Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION H1 6'-9'

SAMPLE NO. D6433 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 2-Chlorophenol | <330. | 2,4,6-Trichlorophenol | <330. |
| 2-Nitrophenol | | 4-Chloro-3-methylphenol | <330. |
| Phenol | | 2,4-Dinitrophenol | <1650. |
| 2,4-Dimethylphenol | | 2-Methyl-4,6-dinitrophenol | |
| 2,4-Dichlorophenol | | Pentachlorophenol | |
| | | 4-Nitrophenol | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: [signature]

Date: June 23, 1987

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LABORATORIES, INC.

# Purgeable Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION H2/H3 5'

SAMPLE NO. D6434 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-10-87

| | ppb | | ppb |
|---|---|---|---|
| Chloromethane | <40. | t-1,3-Dichloropropene | <20. |
| Bromomethane | | Trichloroethene | |
| Vinyl chloride | | Benzene | |
| Chloroethane | | Dibromochloromethane | |
| Methylene chloride | <20. | 1,1,2-Trichloroethane | |
| 1,1-Dichloroethene | | c-1,3-Dichloropropene | |
| 1,1-Dichloroethane | | 2-Chloroethylvinyl ether | <40. |
| t-1,2-Dichloroethene | | Bromoform | <20. |
| Chloroform | | 1,1,2,2-Tetrachloroethane | |
| 1,2-Dichloroethane | | Tetrachloroethene | |
| 1,1,1-Trichloroethane | | Toluene | |
| Carbon tetrachloride | | Chlorobenzene | |
| Bromodichloromethane | | Ethylbenzene | |
| 1,2-Dichloropropane | | Xylenes | 20. |

**Methodology:** Federal Register—40 CFR, Part 136, October 26, 1984

**Comments:**

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**Authorized:** [signature]

**Date:** June 23, 1987

**OBG LABORATORIES, INC.**

# Base/Neutral Priority Pollutants

CLIENT: PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION: H2/H3 5'

SAMPLE NO. D6434 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 1,3-Dichlorobenzene | <330. | Diethylphthalate | <330. |
| 1,4-Dichlorobenzene | | N-nitrosodiphenylamine | |
| 1,2-Dichlorobenzene | | Hexachlorobenzene | |
| Hexachloroethane | | 4-Bromophenyl phenyl ether | |
| Bis (2-chloroethyl) ether | | Phenanthrene | 330. |
| Bis (2-chloroisopropyl) ether | | Anthracene | <330. |
| N-Nitrosodi-n-propylamine | | Di-n-butyl phthalate | <330. |
| Nitrobenzene | | Fluoranthene | 370. |
| Hexachlorobutadiene | | Pyrene | <330. 250.J |
| 1,2,4-Trichlorobenzene | | Benzidine | <1650. |
| Isophorone | | Butyl benzyl phthalate | <330. |
| Naphthalene | | Bis(2-ethylhexyl)phthalate | 630.B |
| Bis (2-chloroethoxy) methane | | Chrysene | <330. 210.J |
| Hexachlorocyclopentadiene | | Benzo(a)anthracene | <330. 220.J |
| 2-Chloronaphthalene | | 3,3-Dichlorobenzidine | <660. |
| Acenaphthylene | | Di-n-octylphthalate | <330. |
| Acenaphthene | | Benzo(b)fluoranthene | 200.J |
| Dimethyl phthalate | | Benzo(k)fluoranthene | |
| 2,6-Dinitrotoluene | | Benzo(a)pyrene | 150.J |
| Fluorene | | Indeno(1,2,3-cd)pyrene | |
| 4-Chlorophenyl phenyl ether | | Dibenzo(a,h)anthracene | |
| 2,4-Dinitrotoluene | | Benzo(g,h,i)perylene | |
| 1,2-Diphenylhydrazine | | N-Nitrosodimethyl Amine | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:** B = method blank had 360ppb of this compound
J = detected but below method detection limit

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Authorized: [signature]

Date: June 23, 1987

OBG LABORATORIES, INC.

# Acid Priority Pollutants

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION H2/H3 5'

SAMPLE NO. D6434 DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-5-87

| | ppb | | ppb |
|---|---|---|---|
| 2-Chlorophenol | <330. | 2,4,6-Trichlorophenol | <330. |
| 2-Nitrophenol | ↓ | 4-Chloro-3-methylphenol | <330. |
| Phenol | ↓ | 2,4-Dinitrophenol | <1650. |
| 2,4-Dimethylphenol | ↓ | 2-Methyl-4,6-dinitrophenol | ↓ |
| 2,4-Dichlorophenol | ↓ | Pentachlorophenol | ↓ |
| | | 4-Nitrophenol | ↓ |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Comments:**

Authorized: [signature]

Date: June 23, 1987

OBG Laboratories, Inc.
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**OBG LABORATORIES, INC.**

# Laboratory Report

CLIENT PRESTOLITE JOB NO. 1194.004.517

DESCRIPTION Soils

DATE COLLECTED 5-22-87 DATE REC'D. 5-26-87 DATE ANALYZED 6-1-87

| | Sample # | BENZENE (ppb) | TOLUENE (ppb) | ETHYL-BENZENE (ppb) | XYLENES (ppb) |
|---|---|---|---|---|---|
| MW10 2'-4' | D6430 | <10. | <10. | <10. | <10. |
| MW10 6'-8' | D6431 | <10. | <10. | <10. | <10. |
| MW11 4'-6' | D6432 | <10. | <10. | <10. | <10. |
| µg/kg wet weight | | | | | |

**Methodology:** Federal Register — 40 CFR, Part 136, October 26, 1984

**Units:** mg/ℓ (ppm) unless otherwise noted

**Comments:**

Authorized: D.A.Neil

Date: June 22, 1987

OBG Laboratories, Inc.
Box 4942 / 1304 Buckley Rd. / Syracuse, NY / 13221 / (315) 457-1494